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# Oration.

## A PROTEST AGAINST SOME OF THE EVILS IN THE PROFESSION OF MEDICINE.

ORATION ON MEDICINE BEFORE THE FIFTY-FIRST ANNUAL MEETING OF THE AMERICAN MEDICAL ASSOCIATION, HELD AT ATLANTIC CITY, N. J., JUNE 5-8, 1900.

BY J. A. WITHERSPOON, M.D.

NASHVILLE, TENN.

The honor of delivering the annual address on general medicine, which you have seen proper to confer on me, is one which I fully appreciate, and I now take the first opportunity presented to express to the ASSOCIATION as a whole my grateful thanks for so distinguished an honor.

I also take the liberty of hoping that what I may say at this time will receive the hearty approbation of this large body of representative men. Nearly all of my predecessors have spoken of the wonderful progress and brilliant successes of the profession, and, indeed, they have been truly marvelous. The latter half of this century has been one grand triumphal march to the present high plane of rational, scientific, preventive medicine, until to-day we are utilizing every element in nature to solve the many problems of disease.

Chemistry, with its fixed laws of precision, is now receiving its proper recognition, and clearing many hitherto unknown fields of empiricism and doubt. The modern laboratory, with its multiplied methods of investigation, has done much to lift the veil of ignorance and mysticism which has so long obscured the true etiologic factor in many diseases, and made preventive medicine the grandest achievement of the age.

The modern methods of differential diagnosis, more accurate clinical observations, confirmed by pathologic investigation, have done much toward making medicine an exact science.

We are justly proud of these accomplishments, and when we think of the vast army of laborers in this noble work of humanity and the daily spreading of this wonderful store of information broadcast through the medium of modern journalism, making it possible for the most obscure country doctor to keep fully abreast of the times, and by this means to acquire more knowledge in one year than could have been attained in a life-time, a century ago, we have every cause for self-congratulation.

But it is not the object of this address to linger over these bright, golden fields, except to express my thanks and grateful appreciation to my brothers in the profession. I deem it the proper time and place to call attention to some of the most grievous fallacies and hurtful errors that have fallen into the ranks during the onward march, in some instances obstructing the path to true and honorable progress. I am well aware that it is not politic at these annual reunions to call to mind unpleasant things, but we have a high and noble calling, the untarnished honor of which has been placed in our keeping by our illustrious forefathers in medicine, the protection of which should be as a sacred trust; hence, I dare strike the alarm-bell and call to arms those who are resting in a security born of a sense of duty well done. The old guard have long stood at the helm and safely guided the grand ship of honorable medicine into a harbor of calm where the Code of Ethics offers immunity to quacking, pathies and commercialism. But, while they are taking a well-earned rest, dark clouds have arisen, and threatening waves are breaking over the old ship. Therefore, I may be pardoned if I do not follow in the footsteps of some of my predecessors in omitting the advances of the past year, my excuse being an honest conviction of the necessity, and an earnest desire, without malice, to protect the profession from the hurtful tendencies of the times.

### DICTATION BY PHARMACAL COMPANIES.

The first stupendous error, one which is so vast in its influence that it hangs like a withering blight over the individuality of every man in the profession, is the dictation of the innumerable pharmacal companies, the self-constituted advisers in the treatment of diseases about which they know nothing, to the entire profession. All honor to worthy and legitimate scientific pharmacy; we should welcome it as a child of medicine, but as is often the case, the child, as soon as it is out from under the wing of the parent, has grown "bigger than the daddy" and not only tells him how to treat every disease to which flesh is heir, but is condescending enough to formulate his prescriptions with full directions on them, many times omitting the formulæ, but always kindly telling him in what diseases to use them. They are so solicitious that they flood your office with blatant literature full of bombastic claims and cure-alls, and I am sorry to say, too frequently with certificates or articles used by permission from physicians who call themselves reputable. Of course, none of these doctors are members of this body, or even inhabitants of the United States; they live in our new possessions, or some other country without the privilege of resting in the bright light of the Code of Ethics of this ASSOCIATION—a code written by the fathers, broad and liberal enough for any true doctor to practice medicine under for a life-time, without a blush upon his cheek.

But that is not all; these drug-houses are so afraid that some one will die through your ignorance or before dull comprehension becomes alive to the merits of their preparations, that they send a man, frequently a doctor

who was a howling success in the profession before his health failed, to tell you all about how to treat disease. He leaves you with the parting injunction to always specify his preparations, and with the friendly warning to watch the local druggist—whom you know all about—to keep him from substituting, while he assures you that he and his firm—about whom you know nothing—are the personification of honesty, and that you can always depend upon them and their preparations, as the plants from which they are compounded were gathered by their special agent from the grave of Esculapius. And thus they come, with samples galore, until you are reminded of the old southern negro song, "They are coming father Abraham, forty thousand strong," to spread the glad tidings of joy, and make every doctor their walking advertising agent. They are the only people in the world who, without seeing the patient, can tell you how to feed the baby, until he blossoms like the rose, or how to restore the rosy-tinted bloom of health to the blanched cheek of the convalescent. They have an antiseptic that can chase the bacilli typhosi through the lymph-channels and pound them to death in the blood-vessels by throwing red blood-corpuscles at them, or the white blood-corpuscles are called up as a reserve, and the war of the roses is again enacted in the human body. Or, they make the emaciated consumptive so fat that he can hibernate and convert his distressing cough into a laugh of joy. Thus, I might enumerate indefinitely what great things they are doing for us, but seriously speaking, gentlemen, this is a curse to the profession, and takes from it its real scientific application, viz., treating each case upon its merit.

In my humble judgment, the fostering of these establishments is a disgrace to honorable medicine. The true sphere of pharmacy is to make the official preparations of drugs and compound our prescriptions. When a doctor acknowledges his inability to formulate his own prescriptions to suit each case, then he should seek some other occupation, more to his taste of commercialism, or less trying by reason of his lack of qualification.

These institutions have such powerful influence that every medical society meeting must furnish space for their wares, this frequently becoming a place of popular resort where various drinks are served, this taking from the meetings the interest in their scientific work. Yet they are not satisfied with this; it is reported that they have even gone so far as to insinuate themselves into the very body of some of the sections, and that at this meeting they propose to dictate and control the election of officials who are kindly disposed to the manufactured products of their laboratories. Can this be true? Can we rest under such an imputation and retain our self-respect? If these reports be true—and the journals are agitating them, and I have in my possession a letter from a drug house to a journal, making the charge—then, indeed, has the reputation of regular medicine descended to a lower level than I thought. We must have an investigation, and if these charges are true, the time has come for vigorous action. If there are those who are making our holy temple a house of merchandise, then we should drive them from our midst by the scourge of our indignation and contempt as did Christ the money-changers of Jerusalem.

### MULTIPLICATION OF MEDICAL COLLEGES.

Next, I desire to call your attention to the rapid multiplication of medical colleges in this country. In doing this I do not wish to ignore the great work that has been done by the profession through the development and progress of medical education. The notable advances of the past twenty years, such as lengthening the course of study, laboratory work, etc., have been inspired by the profession, and we have greater reasons to be proud, when we remember that these improvements have been carried out without assistance of large endowments, for very few even of our best institutions have had such aid. But, while we give credit, we must also lay to the charge of the profession the increase in poorly equipped institutions that have been born of no need, and that are fostered to no good end. This evil has become especially marked in our great cities. It has become a fad and a means of advertising to organize a poorly equipped medical college, both in teachers and modern means of instruction. The result is cheap notoriety, half prepared students, cheap rates and cheap doctors who bring discredit upon the profession and death to innocent people and who, as a last resort, go into politics and help enact laws harmful to the high standard of honorable medicine.

This induces young, inexperienced graduates to go immediately into a specialty, without experience or special fitness, which is never justifiable. No man is prepared to go into any special field until he has done general work enough to familiarize himself with disease in all of its phases, and neglect of this training is responsible for so many extremists who never temper their thirst for notoriety with common sense. It is this which has caused the loss of many lives and much unnecessary mutilation of the human body. It is this that gives birth to fads and faddists. It is more than probable that the appendix of our forefathers occupied a position downward from its cecal attachment until the surgical dictum went forth, "No man is a perfect man, so long as he has his appendix." Now you find this troublesome little remains of the "missing link" has left its normal habitat and hidden behind the cecal pouch.

Again, take the spectacle fad. Glasses in the past were an insignia of honorable old age; now we truly find them from the cradle to the grave. Even the negro "coon," who has been noted for keenness of vision, following the uncertain meanderings of the opossum with unerring precision during the dark of the moon, or seeing a chicken on the highest roost the darkest night, must now have "specs" to walk the streets in broad daylight.

All honor to true and legitimate specialism; it should be welcome and aided by every general practitioner, as a scientific and correct division of labor in a field broad enough for all, but, this rushing into specialism without the above preparation is truly appalling, and, in my opinion, is injurious, not only to the general profession, but to the truly well-equipped specialist.

### LABORATORY DIAGNOSIS.

I desire to call attention to another serious error which seems to be the popular tendency of the times. I refer to laboratory diagnosis regardless of clinical symptoms. The microscopic demonstration of the presence of etiologic germs of a disease is not sufficient for diagnosis, but only confirmatory; the clinical manifestations should be present, and the close and careful observer at the bedside must remain the highest court, and chemical and microscopic tests his aids. I believe in adhering to bedside experience. The considering of the

ase in all its details—history, tendencies, vitality, general aspect, physical signs, subjective and objective symptoms—aided by the microscope and modern methods of research, when needed, is the only way to practice medicine with justice to yourself and safety to the patient. It is an unfortunate fact that many laboratory men know the habits, morphology and methods of culture and staining of pathogenic bacteria far better than they understand by experience or observation the diseases these bacteria produce. We must not lose sight of the fact, while it is right and gratifying that this work is being done and is of great value to medicine, that our true mission is to save human life.

### MEDICAL POLITICS.

Here let me express my earnest condemnation of medical politics. I am old fogy enough to believe that we should confer honor upon those to whom honor is due; any method of wire-pulling or resorting to the tricks of ward politicians is unbecoming, and should not exist in a medical body, especially in this, the largest and most influential medical society in the country. It can only bring discredit to its members and cripple its usefulnesss. Here, the queen of professional ethics should reign supreme, and, by the light of example, shed her beneficent luster upon the world. The man of true merit, to whom his professional brethren would naturally turn when honors are to be conferred, is often overlooked because his modesty prevents him from advancing his own interests, while men of less ability, but more pull, are placed in positions of honor. This should not be.

One of the most grievous and dangerous errors is the present system of quarantine against epidemic diseases. I refer to local boards of health acting independently, often composed of most inefficient men who owe their position to political preferment rather than to any special fitness for the place. State boards acting independently of other boards are largely responsible for the shotgun quarantines, useless disturbance of business and often ineffectual attempts at protection.

If there is any one department of medicine which stands pre-eminently in the front rank of advancement in this progressive age it is preventive medicine, and, with our increased knowledge, it is a reflection that any serious epidemic disease should gain a foothold on American soil. The only way to prevent this is by giving the power to a National Board of Health. Away with the old political cry of state rights when the lives of our people are threatened. Let us place the strong arm of this government around this land, unhampered by petty jealousy and minor boards. We are confronted by a serious and grave question involving this very principle. Even now, at the Golden Gate, which has always stood wide open to welcome the stranger, that fearful scourge, bubonic plague, has insidiously gained admission. This ASSOCIATION has time and again, directly and indirectly, expressed its views upon this subject, and appealed to the nation through its representatives, but as yet, the full measure has not been meted out. When war with Spain was declared, millions of good "coin of the realm" was voted, and a million men stood ready to enlist and fight for the flag of the grandest country on earth. And yet, a disease is threatening us now, which has claimed more victims than the combined armies of the world, and finds us unprepared to properly meet it. We must make united efforts in the establishment of a National Board of Health, clothed with legal power and supplied with the necessary funds, to protect our people from these threatened invasions of the pestilence that stalketh by night, and wasteth by noonday, peering with his grim face and shaking his matted locks, while from his parched lips he emits the gibberish of a foreign tongue. When armies and strong men falter, and tardy statesmen sit with faces made pallid by fear and guilty conscience, then the world will turn to us, as the protectors of human life, to buckle on our armor and advance to meet the foe, and we must be prepared to do as our profession has always done—advance with a cool head, a brave heart, and unselfish love for our fellow-man.

If by united effort we can get Congress to see that no department, not even the Treasury, is more important than the health of our people, and if we can have our Chief Executive appoint the man for the position, allowing the same assistants and clerks as that of any other of the departments, then we shall be able to stop the invasion of foreign disease, and surely every patriotic citizen can trust the President, regardless of politics, under proper laws enacted by our representatives, to solve this weighty problem.

### INDISCRIMINATE USE OF NARCOTICS.

We should at this time sound a note of warning upon the growing tendency on the part of many physicians to use morphin and cocain indiscriminately. There are but few men here of wide experience who do not daily come in contact with practitioners whose panacea for everything is opium in some of its forms, and while I regard it as a wonderful remedy, capable of great good when judiciously used, I am bound to say that when used as it is by some doctors, it is productive of terrible results. The morphin habit is growing at an alarming rate, and we can not shift the responsibility, but must acknowledge that we are culpable in too often giving this seductive siren until the will-power is gone, and a moral and physical wreck is sent down to shame and degradation, often committing crimes while in the toils of his perverted nature. Nor do the fearful results stop here; too often these tendencies are transmitted to the offspring and these innocent victims are brought into the world, half-made mentally, morally and physically, thoroughly unfitted for the many emergencies of life. Ah, brothers! we, the representatives of the grandest and noblest profession in the world, with the God-given mission of making growth more perfect, life more certain and death more remote, must shoulder the responsibility, follow in the footsteps of the Great First Physician, and warn and save our people from the clutches of this hydra-headed monster which stalks abroad throughout the civilized world, wrecking lives and happy homes, filling our jails and lunatic asylums, and taking from these unfortunates the precious promises of eternal life. The hypodermic "shot," as it is affectionately called, is too often given in a stomach-ache, when a dose of oil is needed, or to relieve painful menstruation month after month, until the bright, rosy-tinted cheek of health and the brilliant eye of youth and healthy young womanhood give way to the dry, pigmented skin and the leaden, expressionless eyes of the morphin habitué, and a life full of promise and usefulness is blighted forever. Why not seek and remove the cause of these, as well as many other

ills for which morphin is given, and thus avoid the spectre which, if you are a conscientious physician, will follow you through life, and like Banquo's ghost, will not down? The same can be said of cocain, which is rapidly becoming a national evil, because of its indiscriminate use in minor surgical operations, and of the unnecessary and hurtful information too often given the laity of its seductive influence on human beings.

### USELESS MULTIPLICATION OF BOOKS.

In approaching the next subject, I feel, before this body, like following the example of the great lawgiver and taking off my shoes, for I realize I am on holy ground. But remembering the maxim of one of the pioneer heroes of my native state, "Be sure you are right, and then go ahead," I have determined to offer my feeble protest against the useless multiplication of books and authors. Every progressive man in the profession feels the necessity of keeping fully abreast of the times, and when a new book is published, will purchase it for fear he may lose some valuable information, too often, to find many of them poor copies of other works, without an original thought, or any necessity or reason for their existence, except perhaps, the ambition of the author. Every medical library, public or private, is groaning under its load of useless repetition, in systems of many volumes. There is a prevailing tendency amounting almost to mania in young men, to rush into print, and I feel that I can talk freely to them, being one myself. This is especially true in our great cities, for, how often do we see a young graduate, after staying in a hospital a year, and then in a laboratory a short time, suddenly unfurl his banner to the world as an authority, and while his English is excellent and his diction perfect, I doubt whether his experience warrants him in assuming the grave responsibilities of an authority on any subject where human life is at stake. I would not be understood to mean that the young men should remain in the rear and withhold any information they may have acquired by arduous labor, nor would I check their worthy ambition or pluck one laurel from their brow, but I do claim their medium should be the medical journals, which are, after all, the greatest educators of the busy physician. When such a man as Osler, a walking encyclopedia of medicine, regrets the day when he sold his brain to the medical publisher, it is time for younger men to pause and consider before they assume the rôle of authorship.

In conclusion I desire to say that a conscientious sense of duty alone induces me to call attention to the threatening storms which, if not checked, while they are yet young and harmless, will eventually undermine the very foundations of true and honorable medicine. Mr. President: when all of these injurious things have been forever eliminated, and the regal robes of ethical medicine rendered aseptic from their present pollution, then we can exclaim with pride, "Sound the loud timbrel o'er Egypt's dark sea, Jehovah hath triumphed; his people are free."

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A CHARLATAN was plying his trade at Zittau, a town in Saxony, advertising extensively throughout the country, when the physicians combined and secured his arrest on the ground of "unlauteren Wettbewerb." The local court acquitted him, but the physicians carried the case to the higher court in Dresden, which condemned the quack to 400 marks fine and forty days' imprisonment.

# Address.

## THE IDEAL PHYSICIAN.*

BY W. W. KEEN, M.D., LL.D.

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PHILADELPHIA.

When casting about for a suitable topic on which to address you, I was much perplexed at first, but finally bethought me that perhaps I could not do you a better service than to sketch in very brief outlines the characteristics of the ideal physician. Let me address you therefore as aspirants for the realization of this ideal.

Few of us, perhaps, at the close of life, can say that we have realized our ideals. But unless we have a high ideal, the trajectory of our life will never have risen to any noble height. "Hitch your wagon to a star," said Ralph Waldo Emerson. Even though you fail you will more nearly reach the firmament than if you had never made the attempt.

The physician may be regarded from three points of view: 1, his personal life; 2, his professional life, and, 3, his public life.

*Personal Life.*—The ultimate basis of esteem is personal character. Wealth for a time may lend its glamor; intellectual attainments for a time may dazzle the judgment; power for a time may achieve apparent success, but when the testing time comes, as come it must to every man when some great temptation to do wrong confronts him, wealth and intellectual power are as if they were not; character is the one thing that tells in this life and death struggle. Having that, you will win the fight and be crowned with the laurel of victory. Wanting that you will succumb, defeated and dishonored. The struggle may be a public temptation known of all men, and if you fall your fall will be like that of Lucifer; or it may be hidden in your own breast, known only to God and yourself; but if you win, the victory is just as great as measured by the eyes of Omnipotence, for a character has been saved and strengthened; a true man has attained his growth.

It is due, I am glad to say, to this prevalence of high character that our profession has won such a lofty place in the esteem of the community. Its purity is almost never impeached. Remember that every time you are alone with a woman-patient in your consulting room, with every eye barred out, she gives her honor into your hands and in turn you place your reputation unreservedly in hers. A whisper will destroy either of you. In my opinion, it is the highest tribute that can be paid to the character of our profession and equally to the credit of our patients that this mutual confidence is so seldom abused and the tongue of scandal is so seldom busied with noxious tales. When you remember that there are over one hundred thousand physicians in this country with daily possibilities of wrong-doing, is it not marvelous that this sacred trust is so jealously conserved?

Greatness of character finds its best expression in kindness. To no one are so many opportunities for this fine trait given as to the physician. In the heyday of health and happiness he is not needed, but when sickness and weariness and woe come, when the bread-winner may be taken, or the loved mother's gentle life may be in peril,

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*The Commencement Address delivered to the students of Rush Medical College, in affiliation with the University of Chicago, June 21, 1900.

or a sweet little child in whom is centered all the tenderness of unbounded love is lying ill, and death seems to dog the doctor's footsteps, then the trusted physician, wise of head and kind of heart, is indeed a welcome visitor. Then can his gentle touch give assurance; then can his sympathetic voice bring hope; then can the thousand and one acts of thoughtful kindness bind to him for life the anxious hearts looking to him as the messenger of life. Even in the daily routine of a hospital clinic, a kind word is often better than any medicine.

Manners make the man. The boor has no place among us. The physician should never be the fop, but always the gentleman; never unclean of clothes or speech, but always neatly dressed and so careful of his words that he need not ask, as did one of General Grant's aids: "There are no ladies present, are there?" "No," was Grant's stinging reply, "but there are several gentlemen." Soiled linen and unclean finger nails are as much condemned by antisepsis as they are by decency. The flavor of stale tobacco smoke about his beard and clothes will never characterize the ideal physician, nor will indulgence in alcohol ever cloud his judgment or disgust his patients.

Make it a point not to let your intellectual life atrophy through non-use. Be familiar with the classics of English literature in prose and verse; read the lives of the great men of the past, and keep pace with modern thought in books of travel, history, fiction, science. A varied intellectual life will give zest to your medical studies and enable you to enter not unequipped into such social intercourse as will beget you friends and will relieve the monotony of a purely medical diet. Let music and art shed their radiance upon your too often weary life and find in the sweet cadences of sound or the rich emotions of form and color a refinement which adds polish to the scientific man.

I suspect the next characteristic of the ideal physician will meet with a ready assent—marry as soon as you can support a wife and the hostages to fortune who will make your home life happy beyond compare. But choose wisely and not too hastily. A bachelor doctor is an anomaly. He can not fully comprehend the hopes and fears and desires of parents. He knows not the lions in the path of childhood. Imagine if you can some sweet lassie confiding to him the symptoms of a heart disease which digitalis can not cure. The ideal physician is a good husband and a good father, and so will he enter into the lives and hearts of parents and children, not as a stranger, but as one who can partake of all their emotions, because he has felt the same joys, partaken of the same sorrows, loved as they have loved, and it may be, drunk to the dregs the same cup of loss.

But the ideal doctor lives also a spiritual life. You gentlemen will have to deal with the entrance and the exit of life. You must often ask yourself what and whence is this new *ego* that is born into the world; whither goes the spirit when it quits this tabernacle of flesh which is left to moulder and decay. The tremendous problems of life and death are daily put before you for solution. You can not avoid them if you would; they are forced upon you by your daily occupation.

As man to man, may I not ask you to give them that consideration which befits the highest problem that can be presented to any human being. That this life, with its hopes and its joys, its diseases and its disasters is all is denied alike by common sense, by reason, and by revelation. He is the best physician who takes account of the life hereafter as well as the life that now is, and who not only heals the body but helps the soul. Let your lives, therefore, be thoroughly religious, religious in your inmost soul, though often you may be denied its customary outward observances. Then shall character, which was my first postulate for our ideal physician, find expression in an ideal altruistic life.

*Professional Life.*—The ideal physician is a member of a learned guild. He should be above the tricks and petty jealousies of trade. True, he lives by his profession, but he who practices for gain is only a hireling and not a true shepherd of the sheep. If you would attain, therefore, to this professional ideal, you must be a constant student, keeping abreast of that scientific progress of which in your community you must be the exponent. You must not be satisfied with the knowledge which you now possess, but you must read, especially the medical journals, or you will be left behind in this day of rapid progress. You must know not only your own language, but must be familiar at least by a reading knowledge, with French and German, and if possible with other tongues. He who knows two languages is twice the man he was when he knew only one.

You must not only be skilful, but careful. I have made not a few mistakes in my own professional life, and in reviewing them I can see that for every one made by reason of lack of knowledge and skill, two at least have been committed by haste or want of care. With all our varied instruments of precision, useful as they are,, nothing can replace the watchful eye, the alert ear, the tactful finger and the logical mind which correlates the facts obtained through all these avenues of information and so reaches an exact diagnosis, institutes a correct treatment and is rewarded by a happy result.

Be careful in your relations to your patients to deal with them conscientiously. In no other calling is the amount of service to be paid for committed absolutely to the judgment and conscience of the person who is to be paid for his services. Whether you shall make few or many visits is left to your discretion and honest judgment. Sordid motives may occasionally lead to the giving of unnecessary attention. But again it is a glory of our guild that very few physicians betray this trust, and those who do quickly lose their professional standing. Watch yourselves jealously in this and never let the greed of gain dull the fine edge of professional honesty.

You will be the father confessor to many a penitent. Family skeletons will be unveiled to you alone. The conscientious duty of professional secrecy is given, I am proud to say, into not unworthy hands. True, physicians are sometimes too lax in the repetition of petty gossip, but the profession as a whole is worthy of the confidences so freely given. Be careful, even to reticence, of any betrayal of this trust. Better suffer misconception and unmerited blame yourselves than betray your patients.

Be brave men. Your fathers were brave men. When pestilence stalks in the streets and contagion lurks in every chamber of illness, where have the doctors been found? Fleeing from danger with the frighted multitude? Nay, verily. If you wish to find them you must seek in the crowded tenements, in the hospitals and in the charnel houses. There you will find them cheerfully tending the sick, facing disease in the midst of its victims and seeking, even in the bodies of the dead, the knowledge that will make them masters of the plague. Witness Rush in the yellow fever of 1797, Gross in the cholera of 1832, Haffkine and Koch in the bubonic

plague of the present time. War has given us many fine examples of personal bravery, but pestilence has bred its many quiet heroes who have gone about their daily duty, simply, fearlessly, devotedly. No granite shaft, no enduring brass may mark their last resting-place, but the Recording Angel has dropped a tear, blotting out their faults, and writ their names high in the roll of fame.

In your professional relations, never forget to be charitable. The best patients you will ever have will be the grateful poor, and your hearts will often find a sincere and grateful glance better payment than any gold. In your relations with other physicians, you will find many opportunities for that same brotherly kindness which is so beautiful a characteristic of our guild. Always extend to other physicians and their immediate families the courtesy of faithful attendance without pecuniary return. Avoid the petty jealousies, which, I am sorry to say, not seldom estrange physicians from each other. Always believe the best motive unless you know the worst is present. Never say an unkind word of a brother doctor when you can utter a kindly one. Try to be just even to those who are unjust to you.

*Public Life.*—In most communities, especially in minor towns and villages, the doctor is one of a small circle of educated men. His scientific studies make him familiar with many public problems, especially those concerning sanitation, the water-supply, the prevention of epidemics, the preservation of the public health, the problems of school life, the fostering of a proper athletic indulgence, the management of prisons, the care of the feeble-minded, the insane, the poor. On all of these questions you must make your voices heard in the communities in which you live or else you give them over to others less qualified and only mischief can follow.

No one, perhaps, is more of a leader than the physician in the various philanthropic enterprises of the day. These are closely allied in many respects to the topics just mentioned, and you will be on boards of directors and managers and trustees where you must bring your influence to bear for a wise outlay of charitable gifts and civic appropriations and for harmonizing the antagonistic elements which too often produce discord and confusion. If you combine the qualities which I have sketched for the ideal doctor, you will find that men will easily recognize you as wise leaders whom they will be glad to follow.

My best wish for you is that you may realize in your own lives these characteristics of the ideal physician. It will matter little then whether your life be long or short, for the proper measure of a life is not how long, but *how* it has been lived, and if you attain to old age, when the hairs whiten and the crow's feet begin to show, when your natural forces are abated, you will then not be alone in the world, but will have honor, love, obedience, troops of friends and one Friend above all others, the Great Physician. And when you pass from this life into the next, then shall you be greeted not only by this one great Friend, but by many from whose pathway you have plucked the thorns and briars of this earthly life; many whom through the devious paths of convalescence you have led back to perfect health, to home, husband, father, mother, children; and even if you have not been able to stay the hands of the grim reaper, those too will greet you whose last hours you have soothed amid the pangs of death and have helped through the new birth into the heavenly Jerusalem.

1729 Chestnut Street.

# Original Articles.

## SHOULD THE MEDICAL UNDERGRADUATE BE INSTRUCTED IN THE PRINCIPLES OF DENTISTRY?*

BY M. L. RHEIN, M.D., D.D.S.

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NEW YORK CITY.

It is, at the outset, necessary that the term "principles of dentistry," as used in this paper, should be specifically defined. Such a definition is required, both because there should be a definite understanding of the points that the discussion should embrace, and because, mindful of the fact that the path of the medical student already bristles with subjects, we should be loath to add an unnecessary amount of work to his daily routine. A requisite knowledge of the shape and uses of the various dental instruments can not be expected of the general practitioner; indeed, all the variations in dental technique as applied both to laboratory and operating-room are distinctively beyond the scope of dental principles, in their relation to general medical education.

The question at issue then narrows itself down to the advisability of the medical undergraduate being acquainted with principles of dentistry as they bear on general medicine. That the general practitioner should appreciate fully the process of dentition, in its relation both to local and constitutional results, can not be denied. Equally as important is it that he should be able to distinguish an incipient alveolar abscess from tic-douloureux, simple caries from caries complicated by exposure of the pulp, or the inflammation attending the eruption of a third molar from that caused by follicular tonsillitis. The medical undergraduate should be taught that no tooth need of necessity be lost through the ravages of caries; to judge of the efficacy of remedying these carious defects, he must of necessity be able to appreciate whether or not a tooth cavity has been properly filled. He should be taught to know that more teeth are lost through disease of the peridental membrane than through all other pathologic conditions of the mouth combined, and that prophylactic measures tending to preserve this membrane are of vital importance. He should be made cognizant of the intimate relationship existing between the general nutrition and proper mastication, so as to realize when artificial teeth are required, and if supplied, whether they are properly inserted. Such knowledge implies a proper understanding of the normal occlusion of the upper and lower teeth; it also leads to the appreciation of the value of orthodontia as a corrective for malocclusion.

A proper appreciation of the foregoing facts necessitates that medical undergraduates be taught dental embryology, anatomy, histology, and pathology, in order that these principles should form a foundation for a correct clinical observation of oral conditions. This will enable the general practitioner to serve best both his own interests and the interests of his patients, and at the same time tend to elevate the standing of the dental specialty.

No more opportune time than the present could have been selected for this discussion. For through the

*Presented in a Symposium on Dental Education, before the Section on Stomatology, at the Fifty-first Annual Meeting of the AMERICAN MEDICAL ASSOCIATION, held at Atlantic City, N. J., June 5-8, 1900.

efforts of our medical schools, and of our state boards of medical examiners, the standard of medical education is advancing yearly. Moreover, this is an era of curriculum extension in all of our medical schools. With the advent of each scholastic term, there is either an extension in the number of subjects taught or a marked improvement in the methods of teaching them. Physiologic chemistry, bacteriology, orthopedics, and the other limited specialties are yearly receiving more attention and very rightly so. Yet, this era of educational progress is utterly ignoring the importance that the principles of dentistry should play in the education of all medical undergraduates. Dental instruction not only is not represented by any individual chair in any of our large eastern medical schools, but the teaching of dental principles is not embraced in any of the allied chairs of medical instruction. A medical education which neglects to train the undergraduate in the principles of stomatology is deplorably deficient. Thinking thus, we desire to show not the *modus operandi* by which the medical curriculum should be recast or altered, but rather the disadvantages resulting from the present deficiency in medical training and the advantages to be gained by supplying this deficiency.

Such oversight in the method of medical instruction results in creating a disposition on the part of the general practitioner, not only to underestimate the importance of the principles of dentistry, but also to consider the dentist rather as an aid to comfort than as an active and important element in preserving the human economy. The evil results of the medical undergraduate's lack of knowledge of dental principles are all-pervading. On the staff of most of our hospitals it is rare to find the name of a dental specialist; yet, only obstinate bigotry may deny the frequent occasions arising in a hospital service that distinctively demand dental treatment.

The poor results that have attended the long-continued agitation for dental representation in the army service well illustrate the poor esteem in which dentists are held by their medical colleagues. All this too, despite the fact that the recent war demonstrated beyond a doubt that lack of official attention not only worked havoc among the soldiers, but also required the establishment of the sporadic and so-called "dental tents," where emergency dental work was performed by volunteers, taken mostly from the ranks.

Not less productive of evil results is the lack of dental representation in our naval service; for can a more disagreeable exigency be conceived than an intractable toothache occurring in a naval cadet on a cruise miles from home—a simple case for a qualified dentist to handle, and yet one which at present usually results in the extraction of the offending tooth, and the conversion of a possible future naval officer into an incipient cripple? And all this, because our medical confrères have failed to appreciate the importance of dental principles.

That ignorance of the principles of stomatology characterizes the general medical practitioner can not be denied; and as a result of this lack of knowledge his opportunities are greatly handicapped, owing to his inability to appreciate the diagnostic, therapeutic, and prognostic aids afforded by the clinical appearances found in the oral cavity.

As regards the diagnostic aid offered by the mouth, a thorough appreciation of normal appearances is both presupposed and necessary, in order to enable the practitioner to recognize the significance of incipient pathologic changes, symptomatic of systemic disease. A red, dry, glazed tongue, with characteristically swollen, hemorrhagic gingivæ, and rapid caries of the teeth are frequently the only signs of an incipient diabetes. Likewise, the characteristic whipcord-like tumefaction of the gum, over the palatal surface of the teeth, is one of the earliest signs of chronic Bright's disease. Similarly in gout, one of the earliest manifestations is the hard, smooth, blackish incrustations of salts found on the roots of the teeth. The peculiar linear discoloration of the gums, found as an accompaniment of metallic intoxication, renders the diagnosis of these sometimes obscure cases both easy and assured. In infantile scorbutus there is no sign of more diagnostic value than the spongy, bleeding, hypertrophied gums, accompanied by an extensive resolution of the infantile tooth structure. Finally, it may be said with confidence that study and observation of the oral cavity will yield many more invaluable diagnostic points to the seekers of them, and thereby serve to lighten the task of the well-grounded general practitioner.

As regards the aid in therapeusis afforded the general practitioner by the recognition of oral malconditions, it is only necessary to recall the pertinent relationship existing between the many neuroses and caries of the teeth. A few citations will best illustrate this fact: Remedying a carious and irritable tooth has often succeeded in abating the intractable vomiting of pregnancy; in the treatment of chorea, attention directed to carious teeth, considered as centers of reflex irritation, has often lessened the severity of the nervous affection. And finally, how well we know the numerous forms of neuralgia that baffle medical skill until the dentist discovers an exposed pulp and removes it.

As regards the influence of oral conditions on the prognosis of systemic disturbances, we have here a field whose full value is unknown not only to the general practitioner, but also to many dentists. The minute differences in local appearances can not fail to suggest to the careful observer a proportionate idea of the systemic disturbance, and thus these appearances lead to a much more exact prognosis. At a recent meeting of the Odontological Society of New York, I recited the history of a case of miliary pulmonary tuberculosis, in which, with no clinical knowledge of the case, I was yet able to give an absolutely fatal prognosis, based on conditions found in the mouth, and verified later, unfortunately, by the course of the disease.

Thus far we have attempted to outline those principles of dentistry, the knowledge of which would be of undoubted value to the general practitioner of medicine, and which, therefore, he should learn as a medical student. Not merely from the standpoint of the general practitioner of medicine, however, should this question interest us. As dentists, it behooves us not to lose sight of the fact that the education of medical undergraduates in dental principles would serve a double utility. There would result an incalculable gain to the medical man, it is true, but it is equally undeniable that the dental profession would also greatly profit by such an educational advancement. The newly-developed ability of the medical man to recognize early pathologic conditions of the teeth and mouth would result in more thoroughgoing prophylaxis, and in the earlier application of treatment. Even more than this, the properly educated medical practitioner would recognize innumerable cases

of important diseases of the mouth, that would otherwise run their insidious course unnoticed and untreated. Granting that early recognition and the early application of treatment were in force, the task of the dental surgeon would thereby be rendered not only less arduous and more satisfactory to himself, but also far less unpleasant to his patients.

Nor is this the only benefit that the dentist would derive from such a change in the medical undergraduate's curriculum. I vouchsafe that there is known to all the members present to-day, that class of dentists, who, like the proverbially stubborn bird, can work well, but refuse to work well. Good dental work is distinctly time-consuming. There are any number of men eminently fitted to do excellent dental work, and who indeed do accomplish excellent results, until they have established a fairly large clientele. Then, suddenly discovering that their rewards are seemingly incommensurate with their labor, and realizing that the discrepancy is due to the time consumed in doing proper work, they sacrifice their ideals. Such a sacrifice is made, largely because the dentist realizes that he is the final judge of his own work. He is fully aware of the general practitioner's inability to pass judgment as to whether his patients are receiving intelligent or mediocre treatment. Armed with such knowledge, the unscrupulous dentist is able to continue the nefarious practice of working against time. The claim that the patient's appreciation of proper work serves as a check against such undesirable practices, is not tenable; for the average patient does not value a piece of work properly. Appreciation of dental work is in a large measure regulated by the confidence reposed in the dentist by the patient; and an incompetent politic man often succeeds better in inspiring his patients with confidence in him than does an honest, qualified practitioner.

I have compared the above class of unscrupulous dentists to the bird that can but will not sing. The analogy may be carried further. The little bird, you know, was made to sing, and likewise the capable dentist can be made to do proper work. Let him realize that Dr. A., who sends him many patients, has graduated from a medical school where dental principles receive merited recognition, and that he therefore values good dental work, and discovers faulty results; and the dentist will cease to work against time, and attempt rather to maintain the professional opinion and favor of Dr. A. In this way, then, also, the education of the medical undergraduate in dental principles will serve to bring about a much needed elevation in the standard of the dental specialty.

Still another way remains, by which an addition to the burden of the medical student's work would redound to the well-being of both dentist and general practitioner. I refer now to the cultivation of a stronger bond of sympathy between the two branches of practice. Educate the medical man properly, and he will learn to appreciate the dentist at his true worth. The value of the dentist's advice and opinion will be on a par with the advice offered by the ophthalmologist, otologist, or laryngologist. He will be consulted by the general surgeon, before a plastic or prosthetic operation is done on the jaws or mouth, and his ideas will be sought by the general practitioner attempting to treat some obscure lesion of the alimentary tract, which might have some connection with oral disease.

Valuable as such a change in medical education would be, and productive of unlimited good, it is nevertheless opposed on various grounds, and for numerous reasons. A discussion of the subject, therefore, would be lacking in completeness did it not consider these objections and show the tenuous foundations on which they rest.

First of all we meet the statement that the medical student, of all other professional students, labors most. His days are taken up with practical work, and his nights with study, and it would therefore be impossible for him to shoulder an additional burden of work. That the medical undergraduate's lot is an arduous one, none of us can gainsay, yet the scope of his work never has and never should be regulated, either by his capabilities for strenuous labor, or by the amount of time requisite for him to complete his course of study. It must not be imagined that the additional amount of study would be excessive; for it is not the mastery of dental technique that is asked of the medical undergraduate, but merely that he acquaint himself with those oral conditions having a bearing on systemic disease. The problem before him is solvable, even if it be difficult. His utility to the community depends on his ability to recognize and alleviate disease; and if a knowledge of dental principles will aid him, as it undoubtedly will, this knowledge must be acquired, at whatever cost of additional expenditure of time and labor involved.

This objection disposed of, what can be said to the often repeated statement that the testimony afforded by the mouth is at best of only slight corroborative aid to diagnosis? Such a statement is truly absurd. The philosopher's stone was never more assiduously sought than are aids to medical diagnosis. If conditions of the mouth will serve to guide a practitioner properly even in a small number of cases, the knowledge of these should be as assiduously cultivated as are the physical signs of the chest and abdomen. In a very recent brochure on pyorrhea alveolaris, Fitzgerald, of London, calls attention to the frequency with which diseases of the gum cause antral empyema, chronic gastritis, phlegmonous gastritis, systemic toxemia, and other infectious diseases, whose early recognition and scientific treatment can not be divorced from the absolute necessity of recognizing and appreciating the primary focus of disease about the gums. There are those who are in honest accord with us in all that has so far been said, but who believe that since there is no lack of good dental practitioners, the medical man can always refer his cases to his dental confrères, and thus conscientiously avoid the disagreeable duty of himself mastering the principles of dentistry. Such a statement, however, is one of the strongest arguments in favor of our proposition. In the first place, the medical practitioner of today is incapable of judging whether or not a particular man is an efficient dentist, and again he is oftentimes equally incapable of discovering early pathologic conditions due to oral disease, and requiring simple dental treatment, in order to effect a cure. We do not deny the existence of innumerable dentists capable of aiding the general practitioner; but we do affirm the general practitioner's lack of proper appreciation of the scope of these dentists and their work in remedying systemic disease.

In conclusion, let it be noted that the mouth and teeth are as much an integral part of the human economy as are the eyes, ears, larynx, or genito-urinary apparatus. The interdependence of systemic diseases and of diseases of the oral cavity is as close as that between the body

and any other of its functionating organs; and therefore the general practitioner is in duty bound to acquaint himself with the appearances of the normal and abnormal oral cavity. The seemingly complete separation of stomatology from general practice, in existence in this country to-day is a result of the failure of medical men of sixty years ago to appreciate the importance of dental principles. What we are striving for to-day is the closure of this gap, and the only feasible way to accomplish it is to acquaint the medical undergraduate with the important bearing that a study of the mouth has on the application of the general principles of medicine. Our thesis is to emphasize the fact that in knowledge lies power, and that the resulting power is always commensurate with the comprehensiveness of the knowledge. That this knowledge need not be all-embracing, we have tried to point out by distinctly limiting the term dental principles; but that it would be of unqualified value, we have also tried to show by pointing out the advantages to be gained from acquiring such knowledge: There would result the necessary feeling of sympathy between the dentist and general practitioner; the general practitioner's work would be of a higher standard, the dentist's work would be more satisfactory, and, lastly and most important, the patient would be better served. These results are truly to be hoped for. Although it is true that the medical profession contains men, who by a self-imposed duty of study and observation, after graduation, have rendered themselves capable of recognizing and properly appreciating diseased conditions in the mouth, yet such men form a glittering minority. We firmly believe that the only way of increasing the number of this conscientious minority is by instructing the medical undergraduate in those principles of stomatology which will make of him a truly broad general practitioner.

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## THE HANDWRITING ON THE WALL: WHAT DOES IT PORTRAY?

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The founders of American dentistry had high professional ideals. The methods of practice at their command were the most crude and almost if not wholly mechanical. They deemed the specialty a part of the healing art and hence a department of the science of medicine. Such profound regard had early practitioners of dentistry for their calling that in almost every instance before or after they had begun practice they took up the study of general medicine. They were capable of practicing and did practice general medicine. The illustrious Haydon, Jeffries and many others were graduates of the best American and foreign medical colleges. Later, from 1810 to 1840—the latter date being that of the establishment of the Baltimore College of Dental Surgery—a long list of medically educated men gave honor and dignity to their special calling. These men were the peers of any in the practice of medicine. I doubt if there has ever been a period in our history when such a large percentage of cultured gentlemen graced the dental specialty. They were men of dignity and standing, men of influence, holding the respect of the people in the community in which they lived.

The foundation of a dental college in 1840 and the creation of a degree divorcing dentistry from medicine, marks the period of the narrowing of our calling. No matter what the views of others may be, the motto of our country—"together we stand, divided we fall"—is as applicable to dentistry as to national affairs. The dental student and too often his teacher have forsaken the broad principles of medicine and have dwarfed the teaching of physiology, pathology, and treatment of the human tooth into mere side issues in comparison with the instruction in extraction, in insertion of dentures, and in crown and bridge work. A single attendance on a dental society and slight perusal of dental journals suffice to show the exceedingly narrow lines into which the profession has drifted. Scarcely a dental journal is issued in which the handwriting is not noticed upon the wall. Indeed, outside of filling cavities and roots of teeth and other mechanical operations the profession is almost at sea. Multitudes of instances might be quoted from current dental literature, but the few following will suffice.

A paper was read recently before the New York Institute of Stomatology, on "Pyorrhea Alveolaris from a Bacteriological Standpoint, with a Report of Some Investigations and Remarks on the Treatment." Experiments familiar to mere tyros in bacteriology were cited, and the following concerning rabbits that were infected: "All were made sick, some were sicker than others, an abscess formed in one." The bacteriologic ignorance in the omission of Koch's law should have prevented its serious consideration by a medical society.

A professor in a western school, commenting on a recent article—"Interstitial Gingivitis due to Autointoxication"[1]—remarks: "I can not agree with the author as to the folly of local treatment, the cases have grown to large proportions in my hands, where local treatment has effected a cure, in fact, I feel so sure of this, that I can not reconcile my experience with his positive conclusions." Can it be seriously assumed that dentistry is so far ahead of the mother profession as to cure constitutional diseases by local treatment?

In August, 1894, in a paper read at the meeting of the American Dental Association, held at Old Point Comfort, Va., the following method of classification of the different forms of so-called pyorrhea alveolaris was given: "This classification is made by simply prefixing to pyorrhea, an adjective stating the name of the disease which is causing the pathological symptoms in the oral cavity, as 'gouty pyorrhea,' 'diabetic pyorrhea,' etc. It is unnecessary to enumerate the subdivisions that might be listed, as they embrace all causes that may disarrange nutrition." With all the admittedly valuable data of the paper, its author ignored the simple fact that bacterial infection implied a suitable culture-medium only. So far as the established infection present in pyorrhea was concerned, that culture-medium might or might not be resultant on any autointoxication due to these diseases. For purposes of clinical study and treatment the pre-pyorrheic stages were all-important. The complexity of the proposed classification would destroy its value for clinical purposes.

In a certain city, dentists were urged to form a society to furnish money to enable a brother dentist to make scientific researches in bacteriology in relation to so-

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1. Internat. Dent. Jour., Feb. 1900.

called pyorrhea alveolaris. This dentist was an amateur in microscopy, who knew almost nothing as to what had already been done in dental bacteriology—the same was true of those who were to furnish the funds—and nearly as little as to bacteriologic laws. He was a man of fair education, but it would have required years to have fitted him to undertake expert work. Would a business man who required an accurate analysis of a certain spring water or compound of drugs or adulterated food employ an individual who had yet to be trained as an analyst? Fortunately for those who were to furnish the money and who expected results, the plan was dropped. This scheme illustrates excellently the unscientific conception of dentistry held by many well-meaning men in the profession.

Under the heading, "Etiology of Pyorrhea Alveolaris,"[2] an attempt is made to determine the etiology of a disease by the examination of deposits about the roots of the teeth, made in three cases by a chemical expert and "six or eight by Professor ———— in my presence, the results obtained corresponding to those of Professor ————." How much weight would such experiments have in a scientific body?

Some years ago the Faculties Association formed a species of trust and appointed professors to write textbooks to be used in the colleges. These honors were parcelled at random on stock-holding principles, regardless of ability or qualification. As might have been expected, the books published, except in one or two instances, are a disgrace alike to author and the professor. Almost all are uncritical compends of a limited field of dental literature. A notable disgrace in this particular is a puerile work on "Orthodontia." Here is a work without a single original idea, a hazy compilation of other men's thoughts reduced to the level of the teacher's capacity and the requirements of the students. The author's mind proved unequal to the task of comprehending works already extant and held in high esteem for their scientific basis. Yet this man was supposed to teach science.

A professor on theory and practice in a dental school, recently speaking of so-called pyorrhea alveolaris, said: "I would advise you to read the views of both Drs. Rhein and Talbot and choose for yourself which theory is correct." This reminds one of the difficulty Lord Timothy Dexter had on punctuation. Lord Timothy gained a fortune by sending warming pans to Africa. He wrote a book, but gave up the problem of punctuation in despair, placing at its end all works of punctuation so that the reader might "pepper and salt to suit himself." The task of scientific analysis was similarly too much for our professor.

In a discussion of prothesis and orthodontia, before the Columbian Dental Congress, another professor remarked: "I am particularly interested in the correction of irregularities of the teeth and I find that the etiology has very little to do with the correction. I find I can correct almost any case of irregularity regardless of the cause." Can it be that dental science has reached such a stage of perfection that disease can be eradicated without the knowledge of cause? This seems strange when it is remembered that the entire trend of medical thought and energy is directed toward the etiology of disease.

In the discussion of a paper on "Degeneracy in its Relation to Deformities of the Jaws and Irregularities of the Teeth," read before the Odontographic Society, another professor said: "The subject is an interesting one, but it is rather one of to-morrow than of to-day. Our knowledge of these facts is not sufficiently advanced to form positive data on which to base certain opinions and I am sure that the subject will not under such circumstances appeal to the members present as something perhaps of another thing would."

The first paper on the subject of irregularities of the teeth was published in 1794. Is it possible that the profession has made no progress in the study of the etiology of such irregularities during the past century? From such remarks by a teacher in two dental colleges, and from the further fact that there was no further discussion of the subject, the inference seems plain that the profession knows nothing about one of the most important questions in its specialty.

Discussing Dr. Frederick Peterson's paper, read before the New York Odontological Society, on "Deformities of the Hard Palates in Degenerates," one dentist remarked: "I feel just a little foolish to-night, because I have brought with me a case full of models that seem to me to be rather out of place. I labored under a misconception of the subject. I understood that it was to be a discussion on cleft palate in its relation to degeneracy, and when I was asked by the chairman of the executive committee to bring some models with me, I agreed to do so. . . . There is one point that I would now make in connection with the models, and that is, whilst they are exceedingly abnormal mouths they are casts from normal people. The patients are not degenerates in any sense of the word, so far as I know."[3] This is, as the newspapers say, very important if true, since congenital cleft palates are generally regarded as most marked expressions of degeneracy.

The following reply was sent to Dr. Vernon Hall in response to a letter as to the use of his "Chemistry and Metallurgy applied to Dentistry":

*Dear Sir*:—Pardon us for not replying to your favor of recent date, but we have been so exceedingly busy with the college rush. We regret now to say that your work on Metallurgy did not meet with very much approval, for the reason that the professors here seem to be "stuck" on Hogden, of San Francisco, Cal., and claim that there is more chemistry than is practical for students' use in your work; and we were very much disappointed at the reception your work received.

A bill is now before Congress for the appointment of dentists in the army and navy. A mail report from General Otis contains an alarming statement regarding the condition of the teeth and jaws of the troops in the Philippines. The case of Walter Fitzgerald, Company C, 28th Infantry, formerly of the Montana Volunteers, is cited: "This young man, 23 years old, has been in the Philippines for a year and seven months. He was one of the first volunteers to reach Manila after Dewey's victory. Nineteen months in the tropics, subsisting on the rations of the army, have resulted in the loss of nearly every tooth in his mouth. It is not the climate alone which is responsible. It is that which undermines the roots of the teeth, while the tropical fever, which has afflicted nearly every volunteer now in the islands, affects the gums of the mouth and loosens the teeth. Grinding on army biscuits and canned beef doesn't naturally improve the teeth. In the case of Fitzgerald, the teeth did not decay, but they dropped out one by one. This is a common ailment in the Philippines and the cause generally is the fever. The hospital surgeons are

2. Ibid., January, 1894.

3. Ibid., December, 1895, page 755.

able to relieve the condition of the patient to some extent, but constant care after the fever is necessary to save the teeth. If this bill should pass and become a law, how many dentists are there who are capable of coping with such conditions as mentioned above? To be sure the dentist might look wise and plug the cavities in these teeth.

An editorial review of a work on "Interstitial Gingivitis" claims: "To say that gingivitis in the dog and sheep resembles or is analogous to the lesions found in man, calls for a very broad imagination. . . . The environments of man are so totally different from those of street or pound dogs or domesticated sheep or guinea-pigs that we must consider this otherwise excellent work as failing to throw much light on the etiology or pathology of interstitial gingivitis."[4] This review speaks for itself. In the light of the great advance in medicine through biologic experiments during the past two decades such an editorial seems an emanation from a Rip Van Winkle who had remained asleep from the days of fetichism suddenly to awaken in the closing years of the nineteenth century and to insist that not he but the world had been asleep.

Many more illustrations could be added, as the dental journals of the past year are replete with examples of such ignorance; still, a sufficient number have been cited to demonstrate the need of a broader education. Until this is acquired no advancement can be made along the lines of original research and no progress is possible. The handwriting upon the wall marks the standard of the profession.

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## LIMITATIONS IN DENTAL EDUCATION.*

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In dealing with limitations in dental education, we are brought face to face with their greatest evil—divorcement of dental from medical teaching. Removal of a special department from general medicine and tuition along narrow lines have so narrowed teaching that even diseases of the general system which affect the mouth, jaws and teeth are excluded. The medical profession has been content to let the dentist entirely alone. In studying systemic diseases, therefore, it has not trespassed on the field of dentistry. The result is that study of the general diseases which affect the mouth, jaws and teeth have been neglected. Limitations of a dental education have prevented the dentist from associating local diseases with systemic causes.

The very title, "Doctor of Dental Surgery," has so closely and exclusively limited the profession, as it is called, that the dentist is known by the laity as doctor of the teeth. A letter received by me March 24, asking me to deliver an address before a state society in a city of 50,000, says: "The people here don't seem to realize that a dentist is anything more than a man with a pair of forceps who can yank out a tooth for a quarter."

The mental atmosphere of the colleges is such that the student very soon imbibes the fixed idea that repair of decayed or dead teeth and restoration of lost ones is all that is expected of him when he leaves college. Anatomy, physiology, chemistry and pathology are so taught as to impress the student with the notion that these subjects have little to do with dentistry, and hence a feeling results that to obtain the degree of D.D.S., the student need have but the dimmest idea of these sciences. The result is that the graduate of dental surgery is not competent to associate systemic diseases with their effects on the teeth, nor is he capable of appreciating systemic lesions due to overtreatment of pathologic conditions of the teeth.

The jaws and teeth, as part of the human body, are influenced by the local and systemic conditions of the human organism. Narrowing our specialty to the treatment of the human tooth and ignoring the influences of the systemic diseases of the body and the local diseases which surround the jaws and teeth has resulted in great mental limitations to the dentist. Only a medical education can remove these mental limitations. Dentists have virtually come to a standstill as far as restoration to health is concerned; nay more, owing to ignorance, not being satisfied with assisting Nature to restore diseased teeth to health, they are in many ways encouraging disease and destruction of the very tissues which they, as specialists, are supposed to protect.

Embryonic evolution teaches that the jaws and teeth are transitory structures degenerating from year to year. They were foreordained to destruction from the very beginning. The teeth, unlike other structures of the body, obtain their size and growth before they erupt. Therefore nourishment and repair are out of the question. If decay of the teeth—which is a natural process—will not remove them, a simple process, interstitial gingivitis, and finally a still simpler process, osteomalacia or senile absorption, will accomplish the result. In the lower vertebrates, such as the whale, shark, snakes, etc., continuous succession of teeth is produced throughout life. Osteomalacia or senile absorption, therefore, is the outcome of the law of atavism. Nature is trying to remove the second set. The changes in the shapes of the alveolar processes tend to lessen the blood-supply of the teeth. A society fad—etiquette in mastication—whereby the lips are closed and the motion of the jaws is barely perceptible in chewing is not conducive to strength and vitality, but atrophy or arrest of development is sure to follow. Is there not a limit to certain operations that are so enthusiastically advocated by dentists? In early races, as indicated by their skulls, and in modern nearly pure races, decay of the teeth, when observed, always commences in the fissures of the crown and at the necks of the teeth below the enamel. These are the defective places in otherwise strong, healthy teeth. In the teeth of to-day, owing to degeneration in shape, size and structure, and owing to modern methods of life, decay takes place at any locality, owing to imperfectly developed tooth structure. Decay is more frequent and more rapid to-day than formerly, and is increasing with great rapidity. It is more rapid in some nationalities than in others.

One is also impressed by the rapidity of decay of the teeth when comparing those in ancient and modern skulls, of nearly pure races, with the teeth of the present generation. With the concentration of all the knowledge, energy and skill that has accumulated in the dental profession, the result of its narrow teaching in the past sixty years, dentists have not been able to prevent the ravages of decay. Nor they will be if they practice present methods for a millenium.

*Presented in a Symposium on Dental Education, before the Section on Stomatology, at the Fifty-first Annual Meeting of the AMERICAN MEDICAL ASSOCIATION, held at Atlantic City, N. J., June 5-8, 1900.

Fillings are inserted no better by dentists to-day than they were forty or fifty years ago. All that any one can or ever will be able to do is to insert a moisture-tight filling, excepting, of course, amalgam. A patient comes; cavities in the teeth are filled; the patient is dismissed with a request to return in six months or a year; he returns, as requested, with more cavities and decay around those recently filled, but the dentist is not disappointed.

With the existing limited knowledge, the central idea seems to be to stop the cavity in the tooth so that it will not decay again. This being the case the entire energy and brain of the profession—so-called—is exerted in finding some means to carry out this idea. The filling must be made more than moisture-tight. To do this it must be malleted in with as much force as patient and tooth can stand, regardless of pericementitis, interstitial gingivitis, necrosis of the jaw, and sensitiveness and death of the pulp from thermal changes. It is perfectly absurd to submit the patient to such agony. The cavity must be measured. If it be the size of a pin-head, the entire approximal surface of solid tooth-substance must be cut away, thus subjecting the patient to hours of torture—to say nothing of the expense and of the furnishing of a larger surface for the destruction of the pulp by thermal agencies. By filling the teeth the cause is not removed. Under present methods dental technique will never prevent decay.

Apropos to what has already been said may be quoted a paper read before the British Medical Society, at the meeting in Portsmouth, Aug. 1-4, 1899, by Dr. James Cantlie,[1] on "Early Decay of the Teeth in Britain." He says: "That the teeth of our children are in a bad way is an acknowledged fact, proved over and over again. . . . The result of all such inquiry has been the publication of statistics proving an abnormal amount of disease. The natural importance of this can hardly be overestimatd. We can not expect to rear a healthy race on carious teeth. . . ."

"The cause of this premature and abnormal decay is, however, scarcely dealt with. . . . The dental art has attained so high a position in this country and in America, so far as the mechanics of the art goes, that there is but little more to be done. . . . But I would like to induce our dental brothers to look a little farther afield and to tell us how to raise the child, so that the teeth while yet unerupted and within the dental sacs may be allowed to grow to the greatest perfection."

"The National School of Dental Techniques" is the last straw on the camel's breaking back. It is the essence of narrowness. It will soon wear out its usefulness and become a thing of the past. What is needed to-day is a broad education in pathology that will find the cause and remove it. Dr. Arch. C. Hart, of San Francisco, as represented in his paper on "Evolution of the Decay," has worked along the right lines. He deserves credit for courage in presenting the subject in a new aspect.

Modern methods of practice, such as gold crowns, bridge-work—producing irritation of the gums—cutting away the teeth—allowing the roots to come close together (Bonwill), thus removing support and nourishment from the teeth—are fruitful sources of interstitial gingivitis.

The application of bridge-work when one or two roots are required to support two or more crowns is certainly pernicious practice. Especially is this true in those cases in which the alveolar process has once become attacked with syphilis or scurvy or poisons, such as mercury, lead, etc., and in those cases in which autointoxication produces interstitial gingivitis. The alveolar processes which have become involved are more susceptible to irritation and finally to loss of structure. From what has been learned in the past four years of the alveolar process and its absorption, implantation and transplantation of the teeth after the jaws have obtained their growth can never be considered a successful operation.

Correcting irregularities of the teeth by the use of springs, ligatures and elastics, after the alveolar process has obtained its growth, requires great skill and judgment to prevent destruction of the alveolar process. Many mouths have been injured by the too rapid movement of the teeth by these instruments. The pernicious habit of "beautifying" the teeth by the use of silk threads, so strongly recommended, has been an object-lesson to many practitioners in the neighborhoods where such operations have been performed. There are many other mechanical operations in which the enthusiast over-reaches the mark, the discussion of which is not apropos at this time. Since dental technique has reached such a high state of perfection in our dental schools, it is high time that the faculties should turn their attention to the scientific side of dental teaching. No wonder that our British and European confrères have such a poor opinion of our dental schools.

Viewing the subject from a university standpoint, dental college teaching is in a rut, and a deep and narrow one at that. A large percentage of the colleges ought not to exist. While the motive of many of the teachers is honorable, a large proportion of them have not the proper education to teach. Presidents and boards of regents of the universities having dental departments should reorganize these schools and place dental teaching on as broad a foundation as other departments of science. The preliminary qualifications, entrance examinations and length of course of study should be the same as in other departments. Then and not until then will dentistry hold the position in the community which it deserves.

1. Brit. Med. Jour., September 2, 1899.

## IS A MEDICAL EDUCATION A NECESSARY QUALIFICATION FOR DENTAL PRACTICE.*

BY ALICE M. STEEVES, D.D.S.

CHICAGO.

In this age of strenuous activity and rapid advancement, when personal gain often seems to be the sole object of professional work, the necessity for a medical education in dental practice may be denied by the narrow-minded in either profession.

The development of specialties in recent years has created a spirit of commercialism in which completeness of education is neglected, and only those studies acquired that can be quickly turned to money. In no specialty has this tendency been more marked than in dentistry.

If concentration of energy and study makes the successful specialist on all medical lines, may not the dentist claim an added opportunity for even greater ability because of the mechanical skill required in his work.

*Presented in a Symposium on Dental Education, before the Section on Stomatology, at the Fifty-first Annual Meeting of the AMERICAN MEDICAL ASSOCIATION, held at Atlantic City, N. J., June 5-8, 1900.

The way upward in dentistry, not unlike all other professional paths of to-day, through cheap competition and unethical practice, is hard enough at best and requires the use of every possible resource.

Dental science originated in the medical profession and, although not permitted to become a part of the mother profession in the begininng, it is recognized to-day as a specialty of medicine, and justly so, for there is no more reason for making a distinct profession of dentistry than of surgery, neurology or ophthalmology.

On the one hand, it is claimed that dental success consists merely in the production of a skillful result from a mechanical standpoint, while on the other we hold that a dental education has the broadest possible significance and includes a knowledge of the structure and function of organs, not only of the mouth but of the whole organism, and of the principles of disease as well.

The dentist should receive the same preliminary education as the medical specialist, because in so far as dentistry is more than a mechanical art, it depends on the same sources and requires the same studies as all other departments of medicine and surgery. The principles of disease are the same, whether they occur in the internal organs, the extremities or the teeth. A knowledge of these elementary principles in one set of organs requires the same studies as that of any other group of organs in the body. The necessity for more complete pathologic training becomes apparent whenever the dentist attempts to treat diseased conditions of the mouth.

It is not enough to remove or advise the removal of the cause of the disease, unless we can make a logical diagnosis as to the cause and be able to predict the probable outcome of its operation. The surgical principles do not differ from those in other surgical practice. The laws of aseptic and antiseptic treatment are just as applicable to dentistry as to amputations, because the inflammation which produces an alveolar abscess is the same process as that which follows any septic infection.

The dependence of one set of conditions on other conditions at distant parts of the body must be recognized. One of the simplest, yet greatest, examples is the perfect assimilation of food, possible only through normal conditions in the mouth.

There is a common interest between the dentist and other medical specialists. The dentist must be familiar with the structure and function of organs other than those of the mouth, while the medical man should be able to recognize the presence of diseased conditions in the mouth and their relation to morbid changes elsewhere.

Medical and dental students should be educated in the same schools, because the fundamental studies which each must pursue are the same, and should be required to take different clinical and laboratory instruction in their separate specialties, only in the advanced courses.

By this combination we would secure the advantages of larger institutions, more fully equipped laboratories, better clinical facilities, and instructions by the best specialists in each department, while the broader scientific atmosphere would create a healthful competition between the students of both branches. If the position of the dental specialist shall equal in dignity and importance the foremost in medicine, it will be necessary to educate and train the dentist more thoroughly in the fundamental principles of medical and surgical science.

The advantages of united work in this ASSOCIATION are many, and he who will grow must avail himself of these meetings. The obstetrician's paper will help us to care for the mother during the period of gestation, that of the neurologist will aid in the management of neurasthenic and nervous patients, which is so often a difficult problem, while the surgeon's paper will assist us because we are surgeons.

I have given but few of the many reasons why the physician and the dentist belong to the same great profession, must work with the same methods, study the same principles; and the dental student may well spend one-half or three-fifths of his time in securing a thorough ground-work in the laws of the medical profession.

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## SOME THOUGHTS ON TEACHING MATERIA MEDICA AND THERAPEUTICS, EMPHASIZING OBJECT TEACHING.*

BY A. H. PECK, M.D., D.D.S.

CHICAGO.

This subject is, I presume, rated by the majority of teachers in dentistry, and certainly by the vast majority of students of dentistry, as the dryest and most uninteresting of the entire college curriculum. Why this is so, I can not tell. I can only leave those who are especially interested in this particular work to draw the inference. As for me, I would not exchange my position as teacher of materia medica and therapeutics for that of any other in the list of instructors. This work is anything but dry and uninteresting, as I find it. I see in this field such opportunities for original research, for broadening of one's mind, for extension of one's knowledge, for general rounding of one's mental capabilities and character—teacher or student—as are found in very few, if any, of the other departments of college work. Surely, the individual who is unable, in the light of such possibilities, to present his work to the students in such a way as to command at the very outset, and to hold throughout, their respect and interest, is certainly not the kind of individual referred to by the gentleman who said, "Poets are born, not made;" for this saying applies just as truthfully to the teacher as it does to the poet.

One of the first and most important questions to be considered in a paper of this character is: Just how far should we, as teachers of dental students, carry our pupils in this great field? Are we justified in being content to teach them just enough to enable them to treat locally, reasonably well and with a respectable degree of success, the various pathologic conditions about the mouth? Or, should it be our aim to so instruct them that they will at once be able to recognize and intelligently prescribe for the various systemic disorders that are constantly aggravating the local pathologic manifestations, many of which are only indexes of the systemic disorders. My answer is most emphatically in favor of the latter course. Please do not understand from this declaration that I would have the dental student subjected to as thorough and complete a course in materia medica as is required of the medical student. However, I am strongly inclined to the belief that this phase of the question should be qualified only by the unfortunate condition invariably imposed upon us, namely, lack of time. Surely, no one will deny that

*Presented in a Symposium on Dental Education, before the Section on Stomatology, at the Fifty-first Annual Meeting of the AMERICAN MEDICAL ASSOCIATION, held at Atlantic City, N. J., June 5-8, 1900.

three years, of six, seven or even eight months each, is insufficient time for the students to become thoroughly learned in all the branches now included in our curriculum; consequently the work in some of the departments must be cut down as much as possible, and perhaps, chief among these is materia medica and therapeutics.

Nothing grieves me more than to hear, as we frequently do, from the older members of the profession, the leaders, those to whom we are accustomed to look for guidance and inspiration, this sentiment, that it is a mere waste of time to teach the dental students more materia medica than is necessary to enable him to treat, reasonably well, the local manifestations of trouble about the mouth.

What would you think of a man enjoying a lucrative practice in a large city like Chicago, or elsewhere for that matter, merely treating with local remedies the local manifestations in the mouth in a case of syphilis, and never even thinking that this disease calls for systemic treatment, to say nothing about possessing the knowledge to prescribe for it. Such a case, under these conditions, was referred to me only a short time ago.

The very logic of medicine lies in one's ability to recognize the primary action of drugs on the various organs, and, through the great systems of the body, the secondary action on other organs, in this manner having an indirect but important bearing on the local pathologic manifestations. Thus one is enabled to note the parallelisms existing between the action of drugs and the pathologic conditions in disease—a very fascinating study indeed.

Let it be understood, then, that we favor the following as the order of their importance: 1. The therapeutics of these drugs with which the student will come in contact daily in his practice, such as the antiseptics, disinfectants, germicides, escharotics, counterirritants, and styptics. 2. A thorough knowledge of at least the standard remedies that may be indicated for the alleviation of all the systemic disorders that may in any way aggravate or affect the local diseases under treatment. 3. A thorough knowledge of the circulatory stimulants and depressants; the respiratory stimulants and depressants; the nerve stimulants and depressants; the hemostatics, diluents and antiphlogistics. 4. A knowledge of the most important of those agents which in any way assist the digestive, assimilative and eliminative organs—the last comprising the sudorifics, diuretics, and cathartics. Local and systemic antidotal treatment is of the utmost importance. The intelligent prescribing of these medicines must never be neglected.

Two important questions now present themselves: How much regarding these various agents shall we teach, and how best may we teach it? In answer to the first question, I would say that we can not teach too much about them. Our students should be well grounded in the pharmacology, source, constituents, physical characteristics and properties and physiologic action—in its broadest application—their dosage and indications and most of all, their therapeutic value, of the various agents. An individual consideration of these agents or groups of agents, however desirable, is out of the question in the time allotted to this paper.

In answer to the second question, How best may we teach this? I will reply that no one rule or set of rules can be followed successfully by all. As indicated above, teachers, as well as poets, are born, not made, and each one will find it necessary to follow the guidance of his own personal capabilities and characteristics. In my individual work I find the recitation plan of inestimable value, the source of the drugs, their physical characteristics and properties, their chemistry and dosage being taught almost exclusively after this plan. The physiologic and therapeutic action of the agents is taught by lectures and by demonstration. However, oftimes I find the recitation method peculiarly adapted to this division of the work. We should strive to make our teaching in these two phases of our work just as interesting to our students and as thorough as possible. It is of the utmost importance that we be able to select the proper drug for a certain form of disease. Blundering in this respect is inexcusable, and often results in the most serious consequences. To understand clearly just how far these agents are affecting the various organs through which they are passing on their disease-healing mission, is most important and neccessary to an intelligent use of them.

Soon after assuming the duties of this chair in college work, I became especially impressed with the many shortcomings of our various text-books. Indeed, any one who has taken the trouble to look into this question will agree with me, that one has only to consult another author than the one that does not suit him, to find teaching to suit his own particular fancy; so at variance are the statements of the many different authors pertaining to these various questions in materia medica and therapeutics.

Their lack of harmony as to the relative potency of the various antiseptics and germicides and their almost total lack of consideration as to what special agent, under certain conditions of irritation, inflammation, sepsis, or otherwise, would be most desirable especially impressed me. I consider it of the utmost importance that our students, and we practitioners, shall be possessed of knowledge that is accurate, regarding especially the essential oils and other agents we are daily using. We should know their relative value or potency as antiseptics, disinfectants and germicides. When we select an agent to place, perchance, in the root-canal of a tooth, it is important that we be familiar with its relative ability to perform that work. Not only this, but I also consider it equally important that we should know the action of these drugs on the soft tissue with which they come in contact. The antiseptics and germicides are poisonous to the vegetable cell. They are used in our work to inhibit the development and to destroy the germs of disease. Many of them are, as well, poisonous to the animal cell. No one will question the great value of being able to select an agent for a certain case that will destroy the germs present—render the parts antiseptic—and, at the same time, will remain harmless in contact with the soft tissue. Frequently it is desirable that an antiseptic or a germicide be used that is also stimulating to the diseased tissues, causing them to yield more readily to the healing influence of the drug. Again, it may be desirable to use one of these agents that imparts a depressing effect upon the soft parts. How are we to make these selections with judgment and certainty without an accurate knowledge of their action when confined in contact with soft tissue?

That I could have something definite to work upon; that I could feel when I went before my class and made

certain statements in this connection that I would verify those statements by actual demonstration, I have adopted the following plan of teaching these phases of the subject: During each term a thorough and complete series of tests is made in the bacteriologic laboratory and before the class, to determine the exact relative value of these agents as antiseptics and germicides. Also an exhaustive series of experiments has been conducted on soft tissue, animal and human, in both a pathologic and normal state, to determine which are irritating, stimulating or depressing, that we may make our selections for special use with wisdom and certainty.

I believe the same individual who teaches therapeutics should teach special pathology. The two fields are so closely co-related it is impossible for a teacher to give a comprehensive course of instruction in the one without trespassing more or less on the other. Since special pathology has been assigned me in connection with therapeutics I find I am able to present the work in a much more interesting manner than I otherwise could do. The students unquestionably gain a clearer and more satisfactory understanding of the various diseased conditions, their pathology and therapeutics, than was formerly possible.

Throughout this brief paper I have hinted at the value of object teaching; I wish now to emphasize this method as strongly as may be. No one can deny that more thorough and satisfactory work can be done by object teaching and actual demonstration, where the nature of the work admits it, than is possible through the medium of lectures. Suppose it is our purpose to teach the class the effect of a certain drug on the various organisms, and for the purposes of illustration we select a cardiac and respiratory stimulant. We go before the class and in language that is simple, plain and can not be misunderstood tell the manner in which the drug affects the circulatory system and the organs of respiration; that it acts directly on the nerve-centers in the medulla and, through the medium of the vasomotor system of nerves, stimulates the muscles of the heart to greater activity, thus increasing the force and frequency of the pulse; and that it acts, through the medium of the circulation of the blood, on the respiratory organs, stimulating them to greater activity, thus deepening and lengthening the inhalations. Again, a suitable animal is provided, placed upon the table in an appropriate manner, is anesthetized that it shall not suffer pain, then with the knife and proper apparatus these internal organs under consideration are exposed to view; the students see them in operation performing their natural functions. Now the stimulating agents are administered and the students see their effect upon these organs. In turn they are taken to the laboratory and required to make the demonstration themselves. Do I hear any one ask which method of teaching will make the profounder impression on the students' minds? Personally, I can see no comparison. The simple pleasing word-picture as presented by the "successful" lecturer makes but a passing impression on the mind of the average student. This can not be called knowledge, only transient information. The actual demonstration which he has made and observed makes a deep and lasting impression on his mind and imparts to him knowledge that is permanent.

We do not think of instructing students in anatomy by only lecturing to them on the subject. The institution of learning that to-day would advocate this would be laughed to scorn. No, we take the students to the dissecting-room and there teach the subject by actual demonstration. What would the teaching of chemistry amount to without the laboratory? And the same question may be asked in regard to the teaching of metallurgy. It is unnecessary for me to follow this line of illustration farther.

It seems to me that object teaching in all branches and departments of our college curriculum which admit of it is the only true effective method to be employed. We must work in this manner of teaching more and more if we desire to make the best return for the favor and patronage of our students. I confidently hope and expect in the near future to see a general move along this line in college work.

## PATHOLOGY OF ACQUIRED HEART DISEASE IN CHILDREN.*

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When asked to write upon this subject for the Symposium of the Pediatric Society I realized how hard it is to make such a paper more than a mere catalogue of lesions. To avoid this it has seemed better and more profitable to consider the subject in a comparative light, and to take the pathologic changes in the adult as a standard by which to develop the difference in the pathology of the child heart, together with some inquiry as to the causes of these disturbances. With such an object in view it seems best to take up first the conditions of nutrition and disease particularly liable to affect the heart in childhood.

### NUTRITION OF THE HEART IN CHILDHOOD.

It is a general law that the tissues respond more quickly and more readily to stimulation and grow more vigorously in early life than after puberty. A corollary to this is that the tissues of the child are more yielding and more likely to give way under a sudden distending force than the more closely knitted tissues of older people. Hence it follows that, when additional demands are made on the heart muscle of the child, hypertrophy will take place more rapidly than in adult life and, under similar conditions, dilatation will be also more common. It is furthermore evident that almost every enlargement of the heart will be an eccentric one, that there will be no compensatory hypertrophy without considerable dilatation, and that unless the general bodily nutrition is very much impaired, simple dilatation will not be long existent before hypertrophy sets in.

Again, the general nutrition of the organism is apt to be much better in children than it is in adults, and the local nutrition of the heart correspondingly better. The degenerative processes so common in middle life—by which is meant not only the physiologic hardening of the tissues, but also the effects of exposure, hard work, alcohol, tobacco, and such other conditions as cause arterial capillary fibrosis—are practically absent in childhood. Hence we can eliminate from our consideration of the pathology of the child heart the permanent increase in resistance due to thickened arteries, the slow fibrosis and puckering of the various valve leaflets, especially those of the aortic orifice, and the narrowing

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of the coronary arteries with its subsequent reaction on the nutrition of the myocardium. From this it follows that in childhood peripheral resistance, with a single exception that will be named hereafter, is never increased. When these facts are considered in connection with the tendency to general good nutrition in childhood, one can easily understand why compensation is quick and thorough in the child heart, and why hypertrophy occurs regularly and quickly under conditions in which it is only occasionally seen in adult life.

### EFFECT OF ACUTE RHEUMATISM ON THE HEART IN CHILDREN.

Lesions of the heart more often follow rheumatic affections in children than in adults. Indeed, these lesions must be considered not as a complication but as one of the manifestations of the rheumatic state. In children the joint lesions are at the minimum, and myocarditis, pericarditis, endocarditis, subcutaneous nodules and chorea—assuming that to be a rheumatic affection—are at the maximum. Pleurisy, tonsillitis and vasomotor and hemorrhagic phenomena as manifested by erythema and purpura are also comparatively rare after puberty. The rheumatic series may show itself, not by simultaneous outbreaks of several of these symptoms, but by the occurrence of each in succession, and, to cite Still in "Allbutt's System of Medicine," the history of a rheumatic outbreak in a child may be the history of the whole period of childhood. The heart inflammation is probably not so often a complication as in adults, but a primary manifestation of a rheumatic condition.

Again, the rheumatic disease of the heart appears to be very virulent in childhood. Lees, in his paper before the British Medical Association, in 1898, said that in 160 fatal cases of this nature, 35 of 115 died in the first attack, and 86 of 100 showed fresh rheumatism during the attack. The fatal result as a rule was not due to endocarditis, but to a much more serious condition, viz.: dilatation of the heart, especially when joined with an extensive pericarditis. Beside Lees, Cheadle and Sansom say in recent articles that dilatation of the heart is a frequent occurrence in the rheumatic affections of children. Lees shows very convincingly that by far the commonest lesion in the cases coming to autopsy is an acute myocarditis of the acute infectious form of the type, also seen in scarlet fever and diphtheria. In 115 cases this condition was present in more than one-third, macroscopically, and Lees concludes, and it would seem rightly, that microscopic examination would have very greatly increased the proportion. The condition was of far greater import, in his opinion, than any other lesions. He ascribed its existence to the direct action of the rheumatic poison, be it infectious or not, upon the heart muscle. He is supported in this view by Cheadle and Sansom. The resemblance between microscopic findings in several of the cases reported by these authors to those of the heart muscle in scarlet fever and diphtheria, as studied by the Germans, is most striking and suggestive.

The next most frequent lesion is a pericarditis, which was present in all but 9 of the 115 cases. In 77 the pericardium was adherent and the changes in the myocardium and pericardium combined, as they appear to be coexistent in the very great majority of patients, present conditions most favorable to the development of dilatation, and may be considered the most serious of the factors causing the heart failure.

Endocarditis must be considered of least importance in determining the immediate effect on the heart. As has been said, the lesions seldom occur alone, but each plays its part in a pancarditis.

The more modern methods of investigation have enabled us to realize fully the rôle played by the myocardium in rheumatic conditions, and the absence of such investigation explains the emphasis laid on the more evident disease of the endocardium by the older writers, and the discrepancy between their figures and those of Cheadle and Sansom.

The percentage of cases of rheumatism that are followed by endocarditis is two or three times as large in children as in adults. Roger, Picot and Claisses place it at from 75 to 78 per cent. of all cases. The report of the Collective Investigation Committee of the British Medical Association places it at 72 per cent. In adults Von Dusch puts the proportion at from 10 to 22 per cent., and the Collective Investigation Committee higher, i. e., 40 to 56 per cent.

The age at which these instances of rheumatic endocarditis occurred in the cases reported by Sansom, Steffen and von Dusch is as follows: Under 5, 48; 5 to 10, 135; 10 to 12, 81. The ages of the cases of the Collective Investigation Committeee are as follows: Under 5, 5; under 10, 27; under 20, 196. That is to say, the number of such cases in the second five years of life is four to five times as great as for the first five years. An explanation for this may be found in the fact that rheumatism is apparently infrequent under 5. Vesnier places the percentage under 5, in 8631 cases, at 3.5 per cent.

### PEURPERAL INFECTION IN THE NEW-BORN.

In diseases of the heart occurring in the first few days of life, the cause seems to lie in the great susceptibility of new-born children to pyogenic infection. I have endeavored to call attention to this in a previous paper.

Three cases of myocarditis, reported by von Dusch, occurred during an epidemic of puerperal infection. The ages were from 4 to 16 days. Wagner describes a similar one of myocarditis. Steffen reports an endocarditis at 12 days and one at 5 weeks. Joseph Sailer reports one of endocarditis at 2 weeks, and von Dusch at least one at 3 days. In my own case of empyema, aged 10 days, there was a parenchymatous myocarditis. The mother was infected during labor, and the child probably was infected through the milk. Viti reported a somewhat similar case, aged 67 hours, which had a pericarditis. Runge, in a child 10 days of age, reports a pericarditis. In none of these in which the history is given was the mother infected until after the birth of the child, and hence they can not be considered to be intrauterine infections.

### ACUTE INFECTIOUS DISEASES.

In the acute infectious diseases attention is directed to the fact that myocarditis is of much greater importance than inflammation of the serous membranes of the heart. It occurs alone oftener here than in any other condition. While a pancarditis is not very unusual, the prevalence of the myocardial changes, especially in their relation to the clinical symptoms, is most interesting.

### DIPHTHERIA.

The fact that diphtheria causes acute changes in the heart muscle has been known since the introduction of modern methods of study, and as time goes on the existence and significance of such changes are more and more

marked. It is quite unnecessary to go extensively into the literature. Our knowledge of the condition has advanced steadily and the list of names of investigators includes Birch-Hirschfeld, Leyden, Romberg, Fenyveffy, Rabot and Philippe. The most recent work has been done by Hallwachs, who concludes, after a study of fourteen cases, that the symptoms of heart trouble after diphtheria always depend on anatomic changes in the heart muscle due to infectious myocarditis. This results from the direct action of the diphtheria toxin. The extent of the lesion depends not on the continuance of the poison but on the virulence of the original dose. But the sudden stoppage of the heart in diphtheria after convalescence is well established is probably not due to the toxin, but to some other and unknown factor acting on the already weakened myocardium. This unknown agent is probably of nervous origin, and is the same as that which causes other paralyses.

According to the investigations of Romberg and Pässler, the sudden collapse that sometimes occurs in the first week is due to central paralysis of the vasomotors, and sudden death in the later period of the disease, to myocarditis. It is probable that the toxin in each period attacks a wholly different part of the circulatory apparatus.

Myocarditis begins in the second week as a rule, and is seldom seen before. It may be very intense and lead to death in several weeks or several days. The affection of the serous membranes in diphtheria usually takes the form of a pancarditis, to use von Jürgensen's term, with the participation of the myocardium in the processes.

### SCARLET FEVER.

The work of Romberg has apparently settled the fact that the poison of scarlet fever, whatever it may be, alone and not mixed with pyogenic micro-organisms, may cause disease of the heart. He is supported in this opinion by von Jürgensen. His tables comprise the analysis of ten cases which were subjected to a very thorough microscopic examination. His figures show that the myocardium is oftener and more severely affected than any other portion of the heart. The tissue next most susceptible is the pericardium, and the endocardium is affected least often.

Pericarditis and endocarditis may follow scarlet fever, but are not as common as the inflammations of the myocardium. Oftener perhaps the three occur together as a pancarditis, in which any of the three tissues may be the place of the greatest involvement. It is very often impossible to distinguish a septic endocarditis from one due to the poison of scarlatina alone, and it is probable that in many cases the trouble is caused by a combination of the two agencies, and that the scarlatinal process has made the endocardium a point of lesser resistance for the entrance of the pyogenic cocci. Endocarditis of the walls of the ventricle is more common than valvulitis.

A very important, if more remote, effect of scarlet fever on the heart is the changes that occur in that organ as the result of scarlatinal nephritis. Many writers have noted that hypertrophy is a common sequence of such forms of nephritis. Friedlander, probably the most recent and authoritative writer on the subject, concludes: 1. That in children dilatation and hypertrophy of the heart are almost never absent in cases of well-established scarlatinal nephritis. 2. That the changes may affect both sides of the heart, but are more marked and more common on the left. The average increase in weight is 40 per cent, but it may be far greater than this. The increase in the capacity of the heart is in almost all cases very considerable.

In acute nephritides from other causes heart changes are not present as often as in scarlet fever. Riegel puts the cause for this on an increased arterial tension in scarlet fever, and says it is found only in cases that show such high tension. Von Dusch says it is probable that the increased tension acts on the heart weakened by a myocarditis, and that this lesion has as much to do with the dilatation as increase in tension. Strangely enough neither of them states why the tension should be so much more increased in scarlatinal nephritis than in the nephritis of other infectious diseases.

Steffen, Cheadle and Silberman have reported similar observations with about the same conclusions. In one of Steffen's there was much dilatation of the right ventricle, and he points out that dilatation occurs more rapidly in cases in which renal dropsy is present.

### MEASLES.

According to the principal authors measles has little or no effect on the heart of children. Occasionally there seems to be an exception, but it is probable that in these cases the disease is due to a mixed infection and not to the measles process alone. In an epidemic in Würzburg, in 1883, the heart was very often involved, but in this instance the course of the disease was said to be very peculiar and atypical, in this way supporting the above supposition.

### RHACHITIS.

According to the researches of Beneke, Steffen, von Dusch and Vogel the malformation of the chests in rhachitic children combined with the changes arising in the lungs from interference with their action, may produce hypertrophy of the heart. Beneke reports a series of cases in which there was absolutely no other explanation for the enlargement. He concludes that in rhachitic children the heart is at least of good size and is very often hypertrophied.

### THE REMOTE EFFECTS OF CONGENITAL LESIONS.

When it is considered how congenital anomalies may throw extra work on the various chambers of the heart, it is easy to understand how the heart may increase in volume and weight from these causes alone, and hence a short notice of them comes properly within the scope of this paper.

Intraventricular openings almost invariably cause hypertrophy and dilatation, and the right side is most affected. The reason for this, it is easy to see, is that the difference in the strength between the right and the left side causes the flow through the openings to be from the left to the right, and hence the right chambers have a greater amount of blood to handle than is normal.

Again, the congenital anomalies of the vessels may have a decided effect on the size and volume of the heart. This is rare, but Bednar[1] has observed considerable cardiac enlargement in a case that would at the present time have been termed one of status lymphaticus. There was hypertrophy of the thymus, lymphatic glands, liver and spleen. Von Dusch, commenting on this case, expressed the opinion that there must have been congenital narrowing of the vessels. Mayr, in 1862, described similar cases. Henoch reports two of enlargement of the thymus with dilatation and hypertrophy of the right ventricle. Beneke also has observed two

1. Krankheiten der Neugeborenen und Säuglinge. 1853.

fatal cases. The authors who have written on status lymphaticus in the last few years make no mention of heart changes, and a study of their cases reveals none. It is probable that von Dusch is right in supposing that such cases, in which enlargement of the heart was reported, were connected with congenital narrowing of the aorta.

Hypertrophy of the left heart may follow narrowing of the aorta in the region of the ductus botalli, as in a series of cases reported by Gerhardt, or the general narrowing of the aorta and blood-vessels described by Virchow in connection with chlorosis. Such changes are usually associated with hypoplasia of the heart, but, according to Von Dusch, cardiac enlargement sometimes occurs. Gerhardt has observed enlargement of the heart in epileptic children. This is probably caused by peripheral spasm.

The strain put on the heart by these congenital anomalies may make it a point of lesser resistance for the attack of the various infectious processes. Thus in six cases of rheumatic myocarditis and endocarditis reported by von Dusch, there were openings between the ventricles. In some reported by Buhl, Rokitansky and Redenbacker, of acute endocarditis following rheumatism, there were similar malformations. In hearts of adults statistics have shown that an acute endocarditis is generally found on a valve which is the seat of an old inflammatory lesion. In children this naturally can not so often be the case, as the opportunities for previous attacks must be less. It would seem as if the point of lesser resistance, which is furnished in an adult by an old endocarditis, may in the child be a congenital anomaly.

### LESIONS OF THE CARDIAC TISSUES.

I have yet to take up the lesions of the various tissues of the heart, and to summarize briefly under each the facts that have already been given.

### MYOCARDIUM.

The inflammations of this structure, that are of most importance in childhood, are: 1. Acute infectious, involving both the interstitial tissue and the parenchyma; 2, acute interstitial—suppurative; 3, chronic interstitial.

The causes of the acute infectious form have been sufficiently considered. The lesions are various, and the process may not be a very diffuse one, but may consist of irregularly distributed areas. It is generally, however, diffuse. The muscle fibers are strikingly degenerated. Transverse striations are indistinct or absent. The fibers may be split longitudinally or show vacuoles. Fatty degeneration can often be demonstrated, in frozen sections, by osmic acid. Nuclei are multiplied and sometimes fragmented. After the process has been in progress for some few days round-cell infiltration appears in the connective tissue between the muscle bundles. The process, according to some authorities, may often go on to abscess formation. The remote effect of such myocarditis depends on the virulence of the poison. It may revolve and leave barely a trace, or, if the destruction has been great and the patient has survived, there may be a diffuse fibrosis.

The acute interstitial form leads to abscess that may rupture into the pericardium, or endocardium, or may cause perforation of the heart walls or septum. This last lesion may closely resemble a congenital perforation. Cases have been collected by Steffen, René Blache and others. The most frequent appear to be infective embolism from pyogenic infections of various parts of the body, rheumatism, typhoid and pleuritis. In these infectious conditions it seems to me that a mixed infection must have played the principal part.

The lesions of the chronic interstitial form consist of general fibrous thickening and fibrosis. The cause is almost invariably syphilis, but it may follow healing of abscesses and may spread inward from a thickened pericardium. Syphilis, however, as has been said, is the most frequent cause. Steffen has collected five cases, all of the same type, i. e., with general fibrosis and small miliary gummata.

Adler, in his paper before the Association of American Physicians, in 1898, contributed to our knowledge of the subject the results of his examination of the hearts of four very young children with undoubted evidences of syphilis. Without marked macroscopic changes in the hearts themselves, microscopically he found endarteritis of the smaller arteries, increase in connective tissue and degeneration of the myocardium. It would seem, from his paper, that a more thorough examination might show the condition to be much more frequent than we have heretofore suspected. A chronic interstitial change in the heart muscle of a child is, however, a very rare condition. The reason lies in the absence of degenerative changes.

### HYPERTROPHY AND DILATATION.

Quick response to stimuli, ability of the general nutrition to recover itself, and the absence of degenerative changes in the coronary arteries render the heart of childhood much more liable to hypertrophy than that of the adult. These circumstances make compensation much more thorough and the number of cases of so-called idiopathic hypertrophy much larger.

The two principal causes of dilatation have been discussed under the head of rheumatism and myocarditis. Owing to the yielding nature of the child's tissue, dilatation always participates in any enlargement of the heart, and the volume of the chambers is invariably considerably increased; at the same time the walls are thickened. From what has been said it will be seen that simple dilatation without hypertrophy is of the greatest rarity, and only occurs—as has been noted by von Dusch—in conditions such as pertussis, where a great strain is thrown on the heart weakened by some infectious process. Hypertrophy comes from an increased demand on the work of the heart muscle.

Hypertrophy of the left ventricle is, in children, relatively less common than in adults, while enlargement of the right ventricle is more common. The reason of this is that the causes that produce hypertrophy of the left ventricle in adults are not present in children. The first of these is aortic stenosis, which is rare in childhood. Atheroma and aneurysm are almost unheard of at this age, and contracted kidneys, while occasionally reported, do not occur often enough to be taken into consideration.

To recapitulate the causes leading to hypertrophy and dilatation: 1. Conditions inducing hypertrophy are: *a*, valvular lesions; *b*, adherent pericardium; *c*, congenital narrowing of the aorta—left heart; *d*, congenital openings between the sides—right heart; *e*, rhachitis—right heart; *f*, scarlatinal nephritis—left heart. 2. Causes leading particularly to dilatation are: *a*, acute myocarditis alone or in combination with pericarditis; *b*, chlorosis and other anemias; *c*, severe forms of pertussis.

Failure of compensation after it has once been well established is rare in children. The local anemia which is often seen in the adult heart is prevented in childhood by the absence of degeneration in the coronary arteries. General malnutrition, however, may accomplish the same result in childhood as coronary atheroma does in later life. The diseases leading to this condition are probably most often typhoid or chlorosis.

### ENDOCARDITIS.

Acquired endocarditis is usually left-sided, and almost always in the mitral valve or its chordæ tendinæ. Congenital abnormal openings between the two sides of the heart; congenital stenosis of the pulmonary valves and malformations of them and of the aortic valves, appear to be predisposing causes. So also congenital narrowing of the great vessels, causing hypertrophy of the left ventricle, appears to render the heart more susceptible to change. These predisposing causes are naturally more important in children than previous lesions of the valve.

The condition must not be confused with the nodules in the valve-leaflets in new-born children, first described by Cruveilhier in 1849, and a few years later by Albini. These nodules are the size of barleycorns. They occur in the auriculoventricular valves of both sides of the heart. They are at first mucoid and later become fibrous. Albini has described twenty to thirty in one case. According to Bernays, these nodules are the remains of the primary simple valves of fetal life. They may show small hemorrhages which may become so considerable as to transform the nodule into a hematoma.

To recapitulate the causes of acute endocarditis, we have, in the order of their frequency: infectious fevers, especially scarlet fever, diphtheria, and typhoid, septic and pyemic conditions, tuberculosis and pneumonia.

It seems sufficient to classify endocarditis into the simple and the severe forms, the latter including the so-called ulcerative or malignant cases. The lesions are an inflammatory exudation in the connective-tissue layers, with coagulation necrosis of the covering layer of the endocardium. On these fibrin from the blood is deposited in layers forming vegetations. The vegetations come upon the walls of the chambers of the heart, as well as upon the valves. They can be reabsorbed or lead to thickening and shriveling with stenosis and insufficiency. The process—if severe—may spread to the neighboring myocardium and may even lead to abscess formation there. In 155 cases collected by von Dusch, the distribution of the endocarditis was as follows: the mitral alone was affected in 117 cases; the mitral in combination in 27; aortic alone in 12, aortic in combination in 13; tricuspid alone in 1, in combination 9; pulmonary alone in 1, in combination in 5.

Emboli may be swept away from the soft vegetations, and give rise to infarction. Such embolism is frequent in the arteries of the brain, especially in the arteria fossæ sylvii sinistra. In fourteen cases of embolism which Steffen has collected from the literature, there were nine of the brain artery. Most of these were in the artery of the fossa of Sylvius.

Chronic endocarditis is usually the result of the acute form. It is characterized by absence of the tendency to calcification, although cases of such degeneration have been observed. Insufficiency of the mitral valve is by far the most common of all the chronic lesions in children. As has been said, aortic disease is very rare. In adults, Willigk gives the ratio of disease of the mitral to the aortic as 32 to 22, and other observers give still higher proportions. Henoch gives the ratio in children as 11 to 2. The cause of this, as has been shown, lies in the greater rarity of chronic arteritis in childhood.

N. E. Corner Fortieth and Locust Streets.

## SYMPTOMATOLOGY OF VALVULAR HEART DISEASE IN CHILDREN.*

BY FREDERICK A. PACKARD, M.D.

PHILADELPHIA.

When the subject of the symptomatology of heart disease in children was assigned to me in the program of the meeting I considered that there was not much to be said regarding it. I find that there is in reality less to be said than I had calculated, as an analysis of case histories has convinced me more even than was the case before, that heart disease, especially in children, has no symptomatology, or rather that there can be said to be no group of symptoms pointing to the heart when so large a proportion of children show signs of heart lesions without the existence of any symptoms indicating their existence.

Consideration of the only method of even suspecting the presence or absence of heart disease in children has been allotted to another member of the society; I refer to physical diagnosis. By careful physical examination alone can we be certain or even reasonably safe in presuming that there is absence of heart lesion.

The very absence of symptoms makes the study of the symptomatology of heart lesions in children interesting if we endeavor to trace its cause. The condition of the circulatory system—heart and blood-vessels—in childhood is essentially different from that of the same organs in later life. In early life the more severe as well as the less important infections have had less time and opportunity for working their immediate and remote effects; intoxications—used as in contrast to the infections—by excesses in food and drink, and the use of possibly harmful substances, such as tobacco, have had no chance to impair the cardiac or vascular walls or to disarrange the nervous mechanism of the circulation; disorders of metabolism have had less opportunity to exert their effects, and finally general wear and tear have not had their influence. It would seem also in childhood that the greater plasticity of the tissues, which we may consider as present at least up to the age of puberty, may have much to do with the ability of the organism to adapt itself to abnormalities of the circulatory apparatus, and therefore show less evidence of their presence. Added to this it is fair to presume that in the formative period of childhood there is greater ability of the tissues to develop beyond the necessities of normal growth on the occurrence of need for such development.

Another explanation of the absence of symptoms in the heart disease of childhood is the fact that the child is in some respects more of a free agent than is the adult. A child made uncomfortable by effort remains quiet; the adult continues to perform the duties of life in spite of discomfort. A child made dyspneic by exercise ceases playing; the adult must continue to work. It is, therefore, easily seen that the child may present no symptoms directly pointing to the heart. It is because of this freedom from necessity for effort that many a child is

*Read in a Symposium on Heart Disease in Children, before the Philadelphia Pediatric Society, April 10, 1900.

brought for treatment because of indolence, listlessness or apathy, rather than for distinctively circulatory symptoms, physical examination showing the existence of cardiac disease.

One difficulty in dealing with the symptomatology of heart disease in children is, as in the adult, the varying symptomatology at different stages of the trouble. In children, however, this is probably less the case than in adults, owing to the remarkable adaptability of the heart in compensating defects and in holding its power until the strain of puberty of itself or combined with the necessity for work takes the place of simple opportunity for play. Consequently failing compensation is less often seen in children than in those of older years.

Another difficulty encountered is that of feeling convinced in a given case that myocardial or pericardial changes—and especially the latter—are not markedly influencing the clinical picture. Inasmuch as the present evening has been devoted to the consideration of valvular disease alone, the symptoms presumably due to valvular lesions uncomplicated by pericardial involvement alone will be considered.

Still another difficulty that I have encountered in assuming the consideration of the subject of the symptomatology is the indefinite limitation of my subject and that of physical diagnosis. I have taken the liberty of somewhat encroaching on the field allotted to another in that I have considered such phenomena as anemia, dyspnea, epistaxis and edema among the symptoms. It may be well in the first place to glance briefly at a few of the statements made by well-recognized authorities on the subject.

Gerhardt[1] says that the symptoms of endocarditis are shortness of breath, anemia, sometimes pain in the region of the heart, and palpitation, the latter symptoms only being present in older children. He also says that in general the symptoms of valvular failure do not differ from those of the adult, dyspnea, cyanosis and dropsy, enlargement of the heart and diminution of urine.

Octavius Sturges, in his well-known Lumleian Lectures on Heart Inflammation in Children[2], says practically nothing regarding the symptoms of chronic endocarditis although his lectures are most complete and exhaustive regarding all other phases of the condition. The reason for this is doubtless the slight importance attached by the author to this division of the subject. On the other hand, in dealing with the symptoms observed at the outset of heart inflammation—including endo-, peri- and myocarditis—in children he mentions restlessness, increased pallor, anxious expression, dyspnea, delirium and sometimes obstinate vomiting, frequent heart pain and tenderness over the region of the heart.

W. B. Cheadle[3] says: "simple endocarditis, acute or subacute uncomplicated by pericarditis or myocarditis, may run its course without giving rise to any cardiac symptoms," and adds that there may be no pain or dyspnea and even no murmur. Wasting and anemia are mentioned as symptoms. He questions whether the uneasiness, distressed expression, discomfort in the precordial region, palpitation, quickened or excitable pulse and rise of temperature seen in more active inflammation or in the case of fresh valvulitis attacking previously diseased valves are not due to involvement of the pericardium or myocardium.

A. E. Sansom[4] says, in discussing chronic endocarditis —valvular disease: "As a general rule the signs in infants and very young children are chiefly referable to inanition—emaciation, anemia, deformity of the thorax." Cough is mentioned as a prominent symptom. Again, "in children after the age of 4 years, symptoms more directly indicating disorder of circulation become manifest. Bleeding of the nose may be cited as one of these." He then speaks of the symptoms of failing compensation which resemble those seen in adults. Of dropsy, he says that it is "by no means uncommon, but it rarely follows the gradually ascending course usual in the adult. The œdema is either more general or more variable in the site of its manifestation." Under the heading of aortic valvular diseases he speaks of, and mentions, a case showing entire absence of symptoms.

Holt,[5] in speaking of acute simple endocarditis, says that it has no distinctive symptoms and that occurring in the course of acute articular rheumatism there may be an increase of the temperature and the severity of the general symptoms, but rarely anything more definite. Of chronic valvular disease (p. 581), he says that the only subjective symptom of much diagnostic value is shortness of breath on exertion. Symptoms mentioned as inconstant but occasionally present are precordial pain, attacks of palpitation, headache, epistaxis, anemia and cough. Later, he says: "It is rare to see all the symptoms of cardiac failure in children under 10 years, but about the time of puberty they are not uncommon."

Barthez and Sanne[6] say, in discussing acute endocarditis: "Almost always a secondary disease, endocarditis, as is the case with pericarditis, will almost pass unnoticed if one does not take care to examine into the conditions where one can recognize its presence, that is to say if one does not practice auscultation." They lay stress on the absence of any addition of symptoms to those of the primary disease. Of chronic endocarditis they say that symptoms are sometimes altogether absent, but that sometimes there is palpitation and sometimes the symptoms seen in the adult. They examined 73 cases of chronic endocarditis, which they divided into three categories as regards severity of symptoms. Their first category included those without symptoms (latent). This included 21 cases (28 per cent.). Among their 73 cases there were 44 with mitral insufficiency, of which 13 presented no symptoms; 8 cases of mitral insufficiency with aortic insufficiency furnished 1 latent case; 5 cases of mitral insufficiency with stenosis gave 2 latent; 5 of mitral insufficiency with aortic stenosis gave 1 latent; 5 with aortic stenosis furnished 3 latent cases; 3 with aortic insufficiency gave 1 latent. In their second category they placed cases with palpitation, shortness of breath but no edema, enlargement of the liver, etc. This class included also 21 cases—28 per cent. The 44 mitral cases furnished 12 of this number, the 8 of mitral insufficiency and aortic insufficiency furnished 3; the 5 with mitral insufficiency and aortic stenosis a like number, while the 5 of mitral insufficiency and aortic insufficiency and narrowing gave 1 case. Their third class included those with marked symptoms, in which were placed 31 of the 73 cases—about 42.5 per cent. The 44 mitral insufficiency gave 19, the 8 with mitral insufficiency and aortic insufficiency 4, the 5 with mitral insufficiency and aortic stenosis 3, the 5 with aortic narrowing 1, and the 3 with aortic stenosis and insufficiency gave 1 case.

E. Weil,[7] in speaking of acute endocarditis, emphasizes the absence of symptoms and states that embolism may be the first phenomenon to call attention to the

heart. In chronic endocarditis edema may be but little marked. This was the case in only 1 of 9 grave cases observed by him, while in 12 terminated by death from asystole, edema was absent in 5, but little marked in 2, appearing only eight days before death in 2, and with classic evolution in only 3. Of 56 cases analyzed by him, 11—20 per cent.—being fatal, 8 had serious functional trouble, 12 had slight functional trouble, while 24—45 per cent.—were latent. Of acute endocarditis complicating rheumatism, he says: "It comes on insidiously in the course of acute rheumatism without exercising any well-marked influence either upon the temperature or upon the course of the arthropathies. Functional troubles (some palpitation, a little dyspnea, acceleration of the pulse) are rare." "When they acquire a certain intensity one ought to look for a complication—pericarditis, pleurisy, pulmonary congestion, parenchymatous myocarditis."

I have quoted these authors because they will express the views of all who mention the subject of symptomatology of heart disease as it is seen in children. While there is much in the literature regarding the physical diagnosis of heart disease in children, I have found but few who particularly consider the symptomatology. I should however mention, in addition to those from whom I have quoted, Charles West, W. H. Day, Bouchut and von Dusch.

In order to form some idea of the frequency with which symptoms pointing to disease of the heart were present, and their relative frequency, I have examined the histories of 78 cases, including both private ones and those admitted to the Children's Hospital. I had at first hoped to be able to arrive at some conclusions regarding the frequency of entirely "latent" cases, but found that this could not be accurately accomplished, owing to the varying care with which the histories were taken. I have, therefore, had to content myself with an analysis of the cases regarding the relative frequency of occurrence of various symptoms.

Excluding all not bearing internal evidence of care in examination as to the past history, I had remaining for analysis 56 cases. Of these 56, 29 had had shortness of breath, 10 palpitation, 9 edema of the legs, 7 precordial pain, 6 epistaxis, 5 had complained of headache, a like number had been anemic, 4 had complained of abdominal pain, the same number had some cyanosis, and 4 had had blood spitting. Only 3 had mentioned the presence of cough on lying down, or of vertigo, while other symptoms mentioned in only one or two cases were anorexia, persistent cough, night cough, fainting spells, weak spells, listlessness, edema of the face, gastrointestinal disturbance, loss of flesh, vomiting, cold hands and feet, and pain between the shoulders. In some respects the results arrived at somewhat surprised me. I was under the impression that a relatively larger number of heart cases gave a history of epistaxis and of cough on lying down; while the number of cases of edema rather surprised me, as I have frequently remarked to the hospital internes on the rarity of this symptom.

A few of these symptoms might be mentioned more particularly. Of the patients with dyspnea, the youngest was 3 years of age, most of them—seventeen—being over 8 years of age. The reason for this is probably the greater incentive to boisterous play when the child reaches the latter age. The younger patients are more content to keep within the limits of comfort. Precordial pain was not noted in any child below the age of 6 years, a fact probably explained by the vague location of pain in those below that age. The youngest patient in whom edema of the legs was noted was aged 6 years. Vertigo, as would be expected, was not complained of below the age of 8 years, younger patients being unable to explain their sensations with clearness sufficient to make the nature of the symptom apparent. Palpitation was noted in one aged 3 years, and in another aged 6, each of the other eight who presented this symptom being 9 years of age or older. From the notes there is nothing to show definitely that palpitation in the two little patients was subjective and not purely an objective phenomenon observed by the mother. I should judge that the latter was the case.

While my subject is merely that of the symptomatology of cardiac disease in childhood, I can not refrain from speaking of one point that I think should not be overlooked, especially in children. We speak of acute endocarditis, of chronic endocarditis and of valvular heart disease, as though they were three separate entities. This leads to possible error. Acute endocarditis is not a short-lived inflammatory process ceasing with the disappearance of the general infection giving rise to it. For a long time after the rest of the body has recovered, progressive inflammatory changes in the endocardium of the valve leaflets and chordæ tendineæ probably always continue. In that sense then we may look on "acute" endocarditis as a long-continued process, and the term "chronic endocarditis" is in reality a misnomer unless we make this reservation. Valvular heart disease is simply the result of distortion or thickening of the valvular structures by endocarditis; it occurs before endocarditis ends.

It is acknowledged by all that endocarditis can exist without evidence on physical examination. Symptoms are often absent and seldom pathognomonic. It is important, therefore, to always suspect the heart as a possible cause of symptoms otherwise unexplainable—such as anemia, vertigo, faintings, epistaxis, dyspnea—and to bear in mind that the presence of normal sounds over the cardiac areas does not rule out disease of even this important but not sole portion of the circulatory apparatus.

In belittling the importance of the subject allotted to me, I have been endeavoring to also show that, while there is no symptomatology proper of heart disease, the existence of any abnormality makes careful examination as to the functional activity and physical condition of the heart imperative.

258 South Eighteenth Street.

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DR. ALLEN A. WESLEY, late major and surgeon of the 8th Illinois volunteers (colored), in a paper which he read at the meeting of the Association of Military Surgeons, said that without any exception every member of the regiment under his charge who was given to the use of intoxicating liquors had the fever and in a more violent form than those who were total abstainers.

# PROGNOSIS IN THE HEART DISEASES OF CHILDREN.*

BY ARTHUR V. MEIGS, M.D.

PHILADELPHIA.

I have examined several text-books on the diseases of children, and in all of them I found that the discussion of prognosis occupied but very little space. It would not take me ten minutes to read to you all that I found in two or three text-books, and it will not be necessary, therefore, for me to occupy very much time in discussing the subject. It has impressed me, as it must have impressed every physician who has had the opportunity to see sick children, that when they suffer from disease of the heart the prognosis should generally be more hopeful than when adults suffer with heart disease. This is partly because they are more elastic than adults, whose tissues are stiffer and may almost be said to be brittle, and most of all, perhaps, because children who have not attained their full growth have the opportunity for repair during growth. Injury, or any distortion of the heart that is caused by disease may be effaced as the organ increases in size, for the usual tendency of Nature is toward the production of an ordinary type. If due allowance is made for the fact that the likelihood of recovery is greater than in adults, and for the fact that children often outgrow disease of the heart which would be incurable in adults, the prognosis in the heart diseases of children need not be very different from the prognosis in similar disease in older persons. In illustration of the capacity of children to overcome serious organic disease of the heart, I will describe two cases that were under my care:

A woman, now 34 years old, had acute endocarditis during the course of an attack of measles with which she suffered when she was 8 years old. After recovery from the acute attack and for some years afterward, there was a blowing systolic murmur at the apex of the heart, with increase of force of the cardiac impulse. Gradually these evidences of disease of the heart have disappeared and the patient is now a healthy woman. Physical examination yields no evidence of increase in the size of the heart, nor of valvular disease. It seems beyond question that in this case there was organic disease which was outgrown.

Another woman, now 23 years old, had a violent attack of acute chorea with endo-pericarditis when she was a child of 8. There was a murmur which was so loud that it could be heard at the distance of a yard from the child's body. I have seldom seen such severe chorea as existed in this case. There was almost constant and very violent muscular twitching. The illness lasted for a long time, for the child was confined to the house from the early part of January until the month of May. After her recovery from the acute attack, there was a blowing systolic murmur at the apex of the heart with irritability of the cardiac action. These signs continued to be present for some time after the attack, but I do not remember exactly how long. The patient is now a healthy, active girl, and careful physical examination fails to reveal any definite evidence of disease. There is no cardiac murmur audible, but possibly the heart-beat is a little irritable or of slightly increased force. I have often wondered if there are pericardial adhesions. However, as the patient enjoys good health, and as there is no positive evidence of disease of the heart, the case must be classed as one in which organic heart disease was outgrown.

The gravest prognosis should generally be given in cases in which there is conclusive evidence of the existence of great enlargement of the heart. In children, as in adults, it has been my experience that when once the heart becomes greatly enlarged, the patient very rarely recovers and generally goes from bad to worse until death occurs. The existence of valvular disease as shown by the presence of murmurs, even if these be very loud, I consider as of comparatively little importance. I have already expressed myself on more than one occasion as of the opinion that hypertrophy of the heart is not a compensatory condition, and that hypertrophied hearts are always hearts with degenerated walls. This subject is a most important one, but it is one that it would not be well for me to attempt to discuss in full just now. In my book on "The Origin of Disease," in the latter portion of the chapter on the heart, I have expressed my views on the subject.

The histories of two children who were under my care when I was one of the attending physicians to the Children's Hospital, illustrates how death generally comes if the heart is hypertrophied. These were two little girls who were in the wards a number of times in different years, suffering with heart disease and dropsy. In both the heart seemed to be greatly enlarged. They would stay in the hospital for a time and improve until they seemed to be almost well, but the evidence of the existence of cardiac enlargement always persisted. Both of them finally died after several years, the one at the age of 12 and the other at 14 years. Post-mortem examination revealed, in each case that the heart was greatly enlarged and the walls degenerated. In one of the cases the pericardial sac was entirely obliterated by adhesions, and the pericardium enormously thickened. I made careful microscopic examinations in these two cases, of other organs besides the heart, and although there had been little or no evidence during life of any disease except that of the heart, in both of them the microscope revealed the presence of disease of other organs —slight renal fibrosis and other conditions parallel with those found in adults when they die of similar disease. If in cases of heart affections the disease is confined to the heart alone and the other organs remain healthy, it is wonderful how much the heart can bear and yet the patient recover. But, on the other hand, if heart disease is but an expression that organic changes are widely spread in the other organs, then the prognosis must be bad. This is true of children as it is of adults. In the former, heart disease is less fatal than in adults, because they are, for the various reasons that have been given, able to recover from disease of such severity that it would necessarily kill older persons. If a child unfortunately acquires heart disease and survives it, he is more likely to live long than an adult would be under similar conditions, because the body of a child has more capacity to become accustomed to disease, and for this reason prognosis must be more favorable in children than in adults.

In conclusion, let me repeat that probably the most important difference between prognosis in heart disease in children and in adults is that the former have the better chance of recovery, owing to the opportunity they have to outgrow the disease.

1322 Walnut Street.

*Read in a Symposium on Heart Disease in Children, before the Philadelphia Pediatric Society, April 10, 1900.

## THE PATHOLOGY OF CONGENITAL HEART DISEASE.*

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Under this term may be discussed all those conditions of the heart which deviate from the normal and which date their origin between the appearance of the earliest rudiments of the heart in the embryo and the expulsion of the fetus from the uterus.

Many classifications have been suggested, but none are thoroughly satisfactory, some being too broadly comprehensive, some only a detailed enumeration of the lesions found. Thus, one classification may be based on etiology, the anomalies being due to: 1, faults of development; 2, fetal endocarditis; 3, a combination of both, either one preceding the other and predisposing to it. Other classifications may be based on the morbid anatomy, on the symptomatology or on the prognosis. For the purposes and limits of this paper, the one already given will perhaps answer best, with a brief working-out along certain lines.

*Faults of Development.*—A combined anatomic and chronologic division of these may be made into three classes: 1, those occurring early, from the fourth to the sixth week, showing a heart with two or three cavities, *cor biloculare* or *triloculare,* with a single or imperfectly divided arterial trunk; 2, anomalies arising between the sixth and twelfth weeks, with imperfect auricular or ventricular septa, imperfect or misplaced vessels; 3, defects occuring after the twelfth week, resulting in anomalies of the valves, persistence of fetal opening, etc.

*Fetal Endocarditis.*—Other changes than those already mentioned are usually the result of fetal endocarditis. This arises often as the result of some infectious process in the mother, especially rheumatism, but any infectious fever may cause it; syphilis in the mother is said to play an important part. It may also occur without evidence of illness on the part of the mother. Whether it is necessary, in order to produce the endocarditis, for the germs of disease themselves to pass through the placenta from the maternal to the fetal circulation, an event which certainly happens in some processes, or whether the products of bacterial activity, the toxins circulating in the maternal organism, may by a process akin to dialysis enter the fetal blood, can not be stated in every case. Probability in favor of the latter view is strengthened by the form of endocarditis which is invariably the sclerotic or chronic and never the warty or verrucose. The right heart is far more frequently the seat of the inflammation than the left. The usual reason adduced to explain this is the greater amount of work done, as, in extrauterine life, the left side is more frequently affected. It has been suggested, however, by Rosenbach, that the richness of the blood in oxygen is the determining factor. Another reason given is that the right heart is more often the seat of congenital anomalies of the valves, and these are predisposed to inflammation, just as in extrauterine life diseased valves are a weak spot and prone to recurrent inflammation. Heredity is of great importance according to some authorities, in favoring both anomalies of development and fetal endocarditis, as shown by Moussous' classic cases.

With reference to the anatomic lesions, the following table from Holt's work is interesting, the order given being that of the frequency with which the lesions were present in 242 cases: defect in the ventricular septum; defect in the auricular septum or patent foramen ovale; pulmonary stenosis or atresia; patent ductus arteriosus; abnormalities in the origin of the great vessels; pulmonary insufficiency. The most frequently associated lesions were: pulmonary stenosis with defect of the ventricular septum; pulmonary stenosis with defect of the auricular septum; defects in both septa; pulmonary stenosis with defects in both septa.

1801 Pine Street.

*Read in a Symposium on Heart Disease in Children, before the Philadelphia Pediatric Society, April 10, 1900.

## THE DIAGNOSIS OF HEART DISEASE IN CHILDREN.*

BY J. P. CROZER GRIFFITH, M.D.

PHILADELPHIA.

This paper has been prepared on such short notice as to give me no opportunity to consult medical journals and text-book literature. What I have to say is, therefore, purely the result of my own experience with affections of the heart in children.

The first question which naturally arises in diagnosis is, is heart disease present, and if so, is it congenital or postnatal?

Let us take up first the study of congenital heart disease. The principal diagnostic symptoms of this condition are: cyanosis, clubbing of the fingers, thrill, characteristic murmurs, the absence of any great enlargement of the heart.

Cyanosis is peculiarly marked in congenital heart disease; in fact, I do not know of any other condition in which it is so intense. Even in severe forms of postnatal heart disease, with entire lack of compensation and decided blueness of the lips, I never have seen the blue-red tongue, the purplish cheeks, and the general blue suffusion of the body present in the congenital cases. This form of cyanosis, then, is alone an important diagnostic symptom.

Clubbing of the fingers, when present, is a very characteristic symptom. It occurs, it is true, in chronic disease of the lungs, but even the worst cases in this condition show clubbing no greater than, if as great as, that seen in congenital heart disease. Combined, therefore, with cyanosis, clubbing of the fingers is of great diagnostic importance.

The thrill of congenital heart disease is very characteristic. It is very intense, rough, and widely diffused. One may strongly suspect the existence of a congenital affection of the heart from the character of the thrill alone. Yet it is by no means always present.

The typical murmurs of congenital heart disease are loud, rough, and of great intensity. The intensity, in fact, is out of all proportion to the other physical signs connected with the heart. The situation of the murmurs, too, is peculiar. They are not commonly heard with greatest loudness at the apex, but rather over the base of the heart, the sternum and the aortic and pulmonary cartilages. It must be remembered, however, that even in young children there may be loud basic murmurs dependent solely on the existence of great anemia. We must be careful, therefore, not to make the diagnosis from the character of the murmurs alone. I

*Read in a Symposium on Heart Disease in Children, before the Philadelphia Pediatric Society, April 10, 1900.

shall not go into any extended discussion of the diagnosis of the nature of the individual valvular affections, from the character and position of the murmurs, further than to say that those present in pulmonary stenosis are heard loudest at the pulmonary cartilage, while those due to a perforate septum ventriculorum have their greatest intensity over the middle of the sternum. We must remember, too, that the presence of cyanosis in conjunction with a murmur points strongly toward the existence of stenosis at the pulmonary orifice, while the existence of cyanosis without any murmurs awakens a suspicion that there is complete closure of the pulmonary orifice or an anomalous origin of the great vessels.

The fact that there is commonly no great enlargement of the heart in congenital heart disease is peculiar. At most there occurs some hypertrophy of the right side. The condition is in striking contrast to the very great enlargement which is so commonly seen in cardiac affections developing after birth.

The second question is, is there a postnatal heart disease? We must consider *a*, the value of the symptoms apart from the physical signs, and then *b*, the diagnostic value of the physical signs themselves.

*a.* It must be stated at the very outset that the symptoms of heart disease in childhood are quite commonly insignficant or absent altogether. Children have a peculiar power to acquire perfect compensation of a valvular defect. Consequently, heart disease in children is frequently discovered purely by accident, there often being no subjective symptoms. When such symptoms do exist, chief among them is to be mentioned shortness of breath. Very often the presence of this can be elicited only by careful questioning of the child or of the parents. Sometimes we learn that the little boy can not keep up with his companions in active games, or we find him listless and disposed to sit around and play at quieter games with his girl companions. In my experience, the existence of slight shortness of breath is quite commonly the only symptom. In more advanced cases, we may have the ordinary intense dyspnea characteristic of heart disease at any age. In estimating the value of shortness of breath as a diagnostic symptom, we must remember that anemic children may readily exhibit this symptom to a decided degreee.

Edema is a suspicious symptom. It quite commonly begins in the feet and it develops also in the abdomen. It is very important, however, when making a diagnosis, to remember that children become edematous quite easily under certain conditions. We have, for instance, the edema of post-scarlatinal nephritis, which, not at all infrequently, appears first in the feet and not first in the face, as we usually expect it to do. Then there is the edema of the feet which so often develops in marantic infants. Next, the edema dependent on grave anemia is not uncommon. Again, we must remember that ascites in children is not uncommonly due to a tubercular peritonitis, and not to a heart affection. I have at the present time under my observation one or two cases in which the diagnosis between a heart disease and a tubercular peritonitis is by no means certain. Finally, I have repeatedly seen in children a curious tendency to the development of marked and widespread edema without the existence of any discoverable cause whatever.

Faintness is a symptom occasionally seen in children with postnatal heart disease, but in my experience, it is not at all common. I recollect very well one child whose first symptom was a tendency to faint after he had climbed the stairs. Only careful study showed that the disease in this little boy was in reality a cardiac affection.

Precordial pain is in my experience not common in children. I have seen it marked only in advanced cases with extreme lack of compensation. In these I have sometimes found the pain very severe.

Palpitation is a symptom which is of very little diagnostic value in childhood, not so much that it is not present, as because children do not recognize the palpitation or do not know how to describe it. I have seldom found this symptom present.

Cough is in childhood a symptom of no great diagnostic value in cardiac affections. I have found it only where other much more prominent symptoms of the disease were present. In these cases it was an evidence of intense passive congestion of the lungs.

The presence of a decided degree of anemia is sometimes a diagnostic symptom of considerable importance. Many children who have heart disease for some time have a distinctly delicate and anemic appearance which seems to be the direct result of the cardiac affection.

I have found hemoptysis uncommon except in bad cases. The tendency to it, which is not at all uncommon in mitral stenosis in adult life, has seemed to me to be decidedly rare in childhood. I have come across it but very seldom.

*b.* Next, we have the consideration of the diagnostic value of the physical signs connected with the examination of the heart itself. The first question which arises naturally is, does the existence of murmurs prove the presence of heart disease? This is an old question to which the well-known answer is "no." The fact that anemia may be attended by very well marked murmurs in childhood as well as in adult life is well understood and has been already referred to. We have also the existence of what may be termed accidental murmurs, the origin of which we do not understand; but which can not be associated with any certain disease of the valves of the heart. Again there is the murmur which not infrequently develops during and disappears after fever. There are also certain organic murmurs produced outside of the heart, which simulate very closely the endocardial murmurs which are the subject of the present discussion. I refer to the murmur of pericarditis and the cardiopulmonary murmur which has often been described.

On the other hand, heart disease may exist, as we very well know, without the presence of any murmurs whatever, or the murmurs may perhaps come and go for reasons which we do not well understand.

In connection with the study of the heart murmurs, we have two other matters to be carefully studied also: the pulmonary second sound and the size of the heart.

With regard to the pulmonary second sound, we know that its accentuation is a common sign of disease of the mitral valve. In childhood, however, we must carefully remember that the second sound is physiologically accentuated; that is to say, in early and later childhood we expect to find the pulmonary second sound normally as loud as, or even louder than, the aortic second sound. No one can with certainty make a diagnosis of heart disease in childhood without bearing this fact in mind.

Then, with regard to the size of the heart, hypertrophy and dilatation as results of valvular affections become extremely marked in childhood, more so than in adult life. There are certain factors, however, which render the diagnostic value of this sign sometimes uncertain. For

instance, the presence of a nephritis will naturally produce enlargement of the left side of the heart. On the other hand, an asthma with the consequent emphysema will cause the lungs to overlie the heart and make its size appear less than it really is. Then, too, we must remember that in childhood, before the age of puberty, the right side of the heart reaches somewhat farther toward the right than it does in adult life, and that the apex-beat is quite commonly in the fourth interspace instead of the fifth. If these facts be not borne in mind, one might readily make the diagnosis of hypertrophy of the right ventricle when no such hypertrophy was really present.

If, while bearing in mind the various diagnostic symptoms mentioned and the questions which arise in connection with them as already pointed out, we have reason to believe that postnatal heart disease exists, the next matter to be decided is, what variety is it? I can not here enter on this subject further than to say that in mitral insufficiency we expect to have enlargement of both ventricles, but particularly of the right, with very great accentuation of the pulmonary second sound. If one fails to find the accentuation of this second sound, in accordance with the age of the child, the diagnosis often remains somewhat uncertain.

In the case of mitral stenosis, the right side of the heart becomes enlarged, but usually not the left, and the pulmonary second sound is very greatly accentuated. Quite commonly in this affection we find a very marked thrill, which is diastolic in time. The murmur, too, is diastolic, thus distinguishing mitral stenosis from mitral insufficiency, which is systolic in time. With both these lesions, when compensation fails, one naturally gets the symptoms of pulmonary congestion. Other forms of heart disease are less common in childhood, and comments on their symptoms and physical signs must be omitted.

In general, it may be said that in diagnosis of postnatal cardiac affections in childhood we should observe the following points: avoid making a diagnosis from the presence or nature of murmurs alone; remember the altered position of the right side of the heart and of the apex-beat in childhood; remember that the presence of an accentuated pulmonary second sound is normal, not pathologic; remember that compensation is acquired very easily in childhood, and that the absence of symptoms does not prove the absence of cardiac disease; remember that the most suggestive symptom is dyspnea, and that edema must be studied most carefully before it becomes of value as a diagnostic symptom.

123 South Eighteenth Street.

## REPORT OF A CASE OF PRIMARY CARCINOMA OF LIVER.

BY R. C. HARRIS, M.D.

ST. LOUIS.

Robert B., aged 57, a farmer, and native of Switzerland, entered the St. Louis City Hospital March 3, 1899, giving the following history: He had always enjoyed good health, suffering only with the minor ailments of childhood, and with an attack of double pleurisy at the age of 20. His family history was negative. He was accustomed to drinking on an average, five glasses of beer daily, and a small one of whisky early in the morning. He had smoked a pipe incessantly from 12 years of age. He denied having had syphilis, and has never been injured. The malady that ultimately caused his death began about two years ago, at which time, while laboring in the field he was suddenly seized with an excruciating pain in the pit of the stomach, the right side of the chest and the right shoulder, which compelled him to stop his work and rest. After a few moments the pain lessened, but a dull, dragging sensation came on. A physician who was summoned pronounced it a case of gall-stone colic, blistered over the site of pain, also gave cathartics and hypnotics. The patient made a slow recovery, the pain entirely leaving him, but the dull dragging sensation, "the feeling of weight," as he expressed it, mentioned above persisted in the region of the gall-bladder. Soon he noticed that if he attempted to walk fast, or exerted himself to the slightest degree, he would grow tired, dizzy and dyspneic. His ankles began to swell, the swelling extending gradually up the limbs, finally invading the abdominal cavity. His physician withdrew, by paracentesis, about a gallon of bloody ascitic fluid, giving the patient considerable relief.

From this time on he enjoyed fair health, suffering only with the dragging sensation mentioned above, until Feb. 1, 1899, when he began to suffer with a reiteration of the first attack. On entering the hospital, the following were the conditions: The patient was exceedingly well nourished, weighing about 225 pounds, not the slightest trace of jaundice or emaciation being present. The pupils were extremely dilated, but reacted to light and distance normally. The temporal arteries were tortuous and sclerotic, the tongue coated and flabby, and there were visible systolic pulsations in the jugulars. Examination of the chest revealed harshened respiratory murmur of both sides, also a few piping râles over the base of both lungs posteriorly. The apex-beat was about an inch to the left of the nipple and in the fourth interspace. A

1. Cancer Nodules. 2. Thickened Peritoneum.

soft systolic murmur was heard over the mitral area, not transmitted in any direction; a similar one over the tricuspid area, this being plainly audible all over the sternum and right upper chest.

Further examination showed the abdomen to be large, rounded, and capped by a prominent caput Madusa. Several small petechial spots were seen about the neighborhood of the umbilicus. The lower portion of the abdomen was occupied by fluid, determined by succussion, percussion and aspiration. The upper part was occupied by a hard mass, which did not move with respiration. This "mass" extended down to about 1½ inches below the umbilicus; its lower border was rounded and smooth, except in one spot directly over the gall-bladder, where a single hard nodule was found, and which was exceedingly painful to the patient when pressed upon. This was about the size of a small walnut. A peculiar fremitus was elicited by palpation over this area, not unlike the peculiar fremitus of hydatids, but thought in this case to be a localized perihepatitis. Percussion showed the growth to extend upward as far as the fifth rib on the right side; its lower border became imperceptibly lost on the left side under the free margins of the ribs. I succeeded, by the use of the trocar, in withdrawing about a gallon of a sero-sanguinous fluid, which microscopically showed the presence of leucocytes, pigment and blood, the latter being demonstrable by the Teichman hemin crystals.

Uranalysis showed: specific gravity, 1010; straw-colored; acid reaction; slight trace of albumin by heat, nitric acid

trichloracetic acid test; no sugar by any of the ordinary tests, indican present in small quantity, by Jaffe's chlorin test; no bile either by Gmelin's or Pettenkoffer's tests; microscopically, the hyalin and granular casts were seen. Blood examination showed a marked leucocytosis. No examination of stomach contents was made, owing to the enfeebled condition of the patient, also to the fear of rupturing, with the stomach-tube, a varix that might have been present at the cardiac end of the stomach, and be the cause of a fatal hemorrhage.

Palliative treatment with stimulants was resorted to, but the patient continued to sink rapidly and died of edema of the lungs, at 11:45 p. m., the day following his admittance.

Necropsy, four hours after death, gave the following: The mouth and esophagus were normal, the lining membrane of a faint reddish tint; the thyroid gland was normal, likewise the bronchial and cervical glands; the pleural cavities contained a small amount of fluid—not hemorrhagic; both lungs were firmly connected to the walls of the chest by firm, old adhesions and both were edematous below, emphysematous above, partially condensed from hypostasis, and loaded with pigment. The pericardium and heart were unaltered, with the exception of the mitral valve, which was slightly thickened. Several ounces of a bloody ascitic fluid were found in the peritoneal cavity. The diaphragm was pushed up as high as the fourth rib on the right side, the fifth on the left, and the upper surface of the liver was firmly adherent to the peritoneum of the epigastrium, and opposed to the anterior parietal wall of the abdomen, over a space measuring nine inches. The liver was greatly altered by numerous cancerous nodules, the left lobe being especially studded, the nodules varying in size from a cherry to a walnut, and the surfaces were covered by numerous ramifications of blood-vessels, many presenting cicatrix-like depressions, or umbilication in the center. They were of a yellowish-white color, reticulated, few being soft. The vessels of the capsule of the liver were intensely injected. The gall-bladder was contracted, but otherwise normal, also its ducts, the common and the hepatic. The portal vein contained no coagula. The hepatic artery was much dilated. On section of the organ, several similar nodules came into view, nearly all being umbilicated. The spleen was slightly enlarged, otherwise normal. The stomach and intestines were apparently normal, also the pancreas, mesentery and retroperitoneal glands. The kidneys showed all the signs of chronic interstitial nephritis, and the bladder showed the result of a chronic cystitis. The prostate gland was hypertrophied, otherwise normal.

Microscopic examination of the cut specimen showed the growth to be an adenocarcinoma.

Speaking in general, in cases like the above, I might say that of the many gross lesions that invade the cholopoietic system, that of primary carcinoma seems to be the least mentioned in medical literature. This may be owing to the fact that many cases pass through their course with few, if any, typical symptoms. Primary carcinoma of the liver is indeed rare, almost all those of this system mentioned in literature being of the secondary or metastatic type, and are very common. They form about three-fourths of all malignant growths in the liver, and of these two-thirds are secondary to carcinoma of the portal area, and one-third to primary ones elsewhere. (Tyson.) According to Osler, they rank third in order of frequency in the internal organs, following closely on the cancerous affections of the uterus and stomach. Frerichs, in his work on "Diseases of the Liver," gives statistics showing that of all the malignant growths of this organ, one-fourth are primary. Primary cancer may occur in one of three types, first, the massive type in which the growth is usually single, large and occupies the site at, or about, the gall-ducts; it is generally of a grayish-white color, and may reach 8 to 10 cm. in diameter. The second type, known as the nodular, receives its name from the many nodules that occur on and throughout the liver substance. These nodules vary greatly in size and may range from that of an apple to a pea.

These growths are usually opaque, and varying from a white to a dirty yellowish-brown color, due to bile pigments, hemorrhages and decompositions within the malignant area. As a rule the superficial nodules project above the surface of the organ, and may in the emaciated subject be felt through the thin abdominal walls. A close examination of many of these nodules will reveal the presence of umbilication, due to the fatty metamorphosis of the central cells, with subsequent liquefaction and absorption, leaving only a residue of connective tissue and partially obliterated blood-vessels. In the third type, we have a rare form, a form in which the organ is but slightly enlarged; this variety is usually associated with the cirrhotic liver, presents a yellowish-green color, and has been termed the cirrhotic carcinoma. All varieties of carcinoma, either primary or secondary, are liable to undergo degeneration; especially is it so with the secondary forms, the change being as mentioned above. Large hemorrhages may occur, due to a rhexis of the blood-vessels in and about the cancerous area. Histologically, these varieties may be either of the epitheliomatous alveolar or trabecular types, being composed of polyhedral, cuboidal, cylindrical or giant cells.

All of the primary forms start in the liver cells and may be called true epitheliomata. In some forms of the primary type, especially the nodular, cystic formations may be seen. (A case by Dr. Brunton, St. Bartholomew's Hospital Reports, Vol. xii.) In the trabecular forms, we find some resemblance to the adenomata in general, hence some writers have termed this the adenocarcinoma. In the primary forms, the peritoneum covering the liver, diaphragm, duodenum, stomach, spleen and pancreas is liable to become involved by continuity. The lymphatics may suffer, and through the lymphatic vessels, the disease may be propagated to deep-seated glands in other portions of the body.

A hepatic carcinoma is generally of a lardaceous consistency; in rarer cases the mass is hard and cartilaginous or sometimes may be brain-like and almost fluctuating. Its surface, on section, usually presents a dull white color, interspersed with a greater or less number of red spots or streaks, according to the degree of vascularity of the mass. Surrounding the mass, there is seldom any distinct capsule or membrane; ordinarily the new growth passes, in an imperceptible manner, into the surrounding liver tissue. Most of the morbid changes originate from the interlobular connective tissue. Pari passu with the deposition of the cancerous matter important vascular changes take place. As the carcinomatous material is gradually deposited, new branches of the hepatic artery are forming, with a relative diminution in the branches of the portal system. Coursing throughout these cancerous nodules many branches of the hepatic artery are seen, some of which may attain a very large size and may be the cause of a fatal hemorrhage later on in the morbid process. Changes also take place in the lymphatic ducts, which may become swollen, thickened and beaded, due to infiltration of the vessel walls with cancerous material.

Primary cancer of the liver rarely extends widely throughout the system. It occupies an inferior position in this respect to cancer of the mammæ and uterus. The further extension of the disease is affected first by continuity of the peritoneal envelope with the investing

membrane of the duodenum, etc. In many cases the mode of extension is assisted by the newly-formed adhesions. The lymphatic vessels and veins form another source of propagation of this malady. By way of the former the disease extends to the lymphatic glands in the fissure of the organs to the celiac glands or to the anterior mediastinum or to the thoracic duct, and may finally invade the deep cervical glands.

As to the etiology of this affection, very little is known. Age probably heads the list, cancers belonging pre-eminently to the latter decades of life, coming on during the age of physiologic decline. Sex in all probability exerts little or no influence as a predisposing element. In males, according to the majority of writers, they seem to predominate. Some consider them more frequent in females, owing to the fact that gall-stones are much more frequent in those of this sex, and to the importance which they play as a causative factor in production of malignant growths. (Stengel.) Trauma, nervous influences, heredity, etc., can only act as secondary factors.

As to the clinical history of cancer of the liver, this varies greatly, because the local symptoms, which in themselves are diagnostic, are at one time prominently developed from the onset, but at another remain either undefined or latent. Cases are met with, although they are few, where all signs of hepatic disease are wanting, where complaints of an undescribable or undefined character, as indigestion, constipation, etc., together with disordered innervation, are at first the sole symptoms, and where the increasing cachexia, ultimately terminating in death, is the only symptom of an important lesion.

In conclusion I will state that this case is interesting to the profession for one of three reasons: 1. Because it was a disease undoubtedly primary to the liver; we were not able to find the smallest macroscopic nodule that would be suggestive of a primary or malignant focus elsewhere. 2. Because all symptoms diagnostic of malignancy were entirely absent, especially the ever-present cachexia and jaundice, showing how utterly impossible it is in many of the cases to make a correct ante-mortem diagnosis. 3. Because the disease extended over a period of about two years, the average duration of these affections lasting from six months to a year.

1303 North Garrison Street.

## VENOCAVERNOUS ANGIOMA.*

BY ANDREW L. FULTON, M.D.

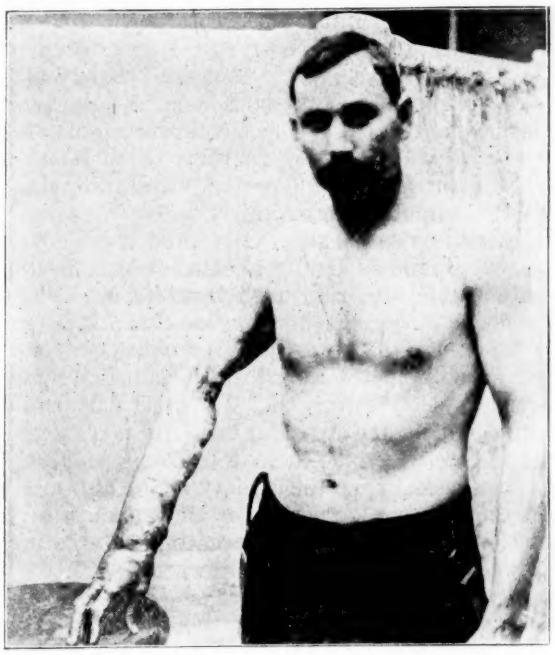
Professor of Operative and Clinical Surgery at the Kansas City Medical College, Professor of the Principles and Practice of Surgery and Clinical Surgery at the Women's Medical College, and Surgeon to the German Hospital.

KANSAS CITY, MO.

The following extraordinary case I shall call *venocavernous angioma,* for want of a better name and for descriptive purposes. The patient was first seen by me about March 1, and continued under my observation until the operation was performed, the data being as follows:

Mr. H., 48 years of age, born and raised in Virginia, gave a family history that was negative. Within a few months after his birth it was noticed that his right arm was not like his left, in appearance, but little was thought of it until he was about 4 years of age, when there was marked discoloration along the course of its superficial veins. This discoloration, of bluish appearance, continued to increase very slowly, although it gave him little or no trouble for several years. He was subjected to all kinds of labor incidental to farming, which he continued to perform with increasing difficulty until he was about 22 years of age, when he could no longer allow his arm to be lowered for any considerable time, on account of the severe pain. For several years prior to this, however, he had performed very little manual labor with his right arm. Subsequently he engaged in various occupations that did not require the use of the arm to any great extent, but it was never free from pain unless elevated. During the last fifteen years or more he has been obliged to carry his hand above his head nearly all of the time. In walking along the streets he could be seen with his arm apparently resting on his head, as if his hat was about to blow off.

On or about Oct. 1, 1899, while passing through the doorway of his barn, a violent hemorrhage occurred,



Venocavernous Angioma.

threatening his life, and he presumed that he had struck his arm against some protruding obstacle as he passed in, but was not certain; it is possible, therefore, that there was a rupture of the exceedingly thin integument at the point of hemorrhage, independent of traumatism. Dr. W. F. Kuhn was called in and arrested the hemorrhage by the use of pressure forceps, when the wound promptly healed and the patient went about his businesss as usual.

I was called in consultation with Dr. Kuhn about six weeks before the amputation referred to later. At that time the cavernous tumors extended from the tips of the fingers to a point beyond the shoulder-joint. The index finger was particularly enlarged by venous caverns. On lowering the arm the blood would rush to the tips of the fingers, by gravitation, and on raising it again the same flow could be seen falling toward the shoulder-joint, and he said he could feel it as far as the chest walll. The returning blood seemed to be governed almost by gravitation. The skin covering most of the arm was exceedingly dark and apparently not thicker than tissue paper, when the arm was lowered. I advised an attempt at

*Read before the Jackson County Medical Society, May 10, 1900.

girdling about the middle of the forearm, at first with a view of ligating the veins in two places and dividing between them. If this had succeeded in the forearm I expected to have proceeded in like manner in the middle of the arm, and this operation failing I had determined to amputate at the shoulder-joint. The case did not present the usual neoplasm that we find in cavernous angiomata, but simply sacs of venous blood extending from the tips of the fingers to some distance beyond the shoulder-joint.

The patient entered the German Hospital on April 17. The next morning, after the usual preparations for amputation, and just before placing him on the operating-table Dr. Franklin E. Murphy photographed the arm as shown in the illustration. The pressure and pain were so great that the patient could scarcely hold his arm by his side long enough for the preparing for and taking of the picture. I believe that if at any time his arm had been held in this position for two hours or less, even had he been able to endure the pain, the skin would have ruptured. After obtaining the photograph, Dr. W. F. Kuhn administering the anesthetic, I operated, assisted by Dr. George Hamel and Dr. Murphy. Barely nicking the skin of the forearm, I opened up a large sac and enormous quantities of venous blood poured out. I soon discovered that there were no veins to be found anywhere, and therefore abandoned this operation and proceeded to amputate immediately below the shoulder-joint, as rapidly as possible. I realized four dangers in this case: 1, the danger from immediate hemorrhage; 2, the entrance of air through these venous channels; 3, embolism within the first two or three days, and 4, thrombosis within two weeeks or more. The first danger was anticipated and guarded against and possibly the second was overestimated. The other dangers in the case were remote and we could have had no control over them. There was some little difficulty in stopping the blood that gushed from the axillary region outward; this venous hemorrhage occurring in large quantities from many sources, and probably preventing air entering the sinuses. As high up as I could feel, nearly to the subclavian vein, there was one sinus, so large that I could thrust two fingers into the cavity, which was what under normal conditions would be the venæ comites. As rapidly as possible we grasped the tissues surrounding the blood-channels, tied them en masse, and ligated the axillary artery low in its course.

On examining the arm after amputation, we found all the adipose tissue absorbed and a great deal of the muscular tissue destroyed, also the humerus, the only bone we examined, was extensively eroded in several places from pressure absorption. Doubtless the bones of the forearm and hand were similarly involved, but we could not ascertain their condition without destroying the pathologic specimen as prepared. The caverns that served as blood-channels were partitioned off more or less by septa resembling cobwebs; these septa were composed of connective tissue, trabeculæ. There was not a vein to be found anywhere in the arm. The caverns involved the skin, which was the only external covering, and this was in many places as thin as tissue paper, while internally the cavernous spaces seemed to be supported by the deep fascia alone. The only reinforcing supports that these channels seemed to have were the web-like septa, or trabeculæ referred to above.

On examining the authorities in my library I fail to find anything like a counterpart to the case, particularly as relates to the extensive involvement, superficial and deep. A remarkable feature was the furious flow of venous blood outward from the axilla, and it must have come from the veins of the head and neck as well as those of the shoulder and trunk of the right side. I have little doubt that the subclavian vein and the smaller veins emptying into it and the axillary vein are mere caverns like those already described.

The patient has made an uninterrupted and rapid recovery without any suffering.

429 Deardorff Building.

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## MYOMECTOMY DURING THE SIXTH MONTH OF PREGNANCY. RECOVERY.

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As a member of the committee on the progress of surgery in the Missouri State Medical Society, I have asked the chairman to allow me to present this paper, which contains the report of a successful myomectomy made during the sixth month of gestation. No successful case of the kind is on record, so far as my knowledge goes, and I have been diligent in my efforts to find one recorded. Since the books at my command did not contain the information I desired on this subject, I addressed letters to a number of the prominent surgeons and physicians of our state and country. I quote from the letters of Prof. Howard A. Kelly, of Johns Hopkins University, Prof. Nicholas Senn, of Rush Medical College, and Prof. E. E. Montgomery, of Jefferson Medical College. Professor Kelly says: "I know of no case of intramural fibroid, i. e., one with a thick capsule of uterine muscle over it, which has been removed in pregnancy without provoking abortion," etc. Professor Senn says: "I have done many enucleations but without similar results; the case deserves a permanent place in literature. My enucleations were made on the non-impregnated uterus." Professor Montgomery says: "It has not been my privilege to operate upon a fibroid, intramural variety during pregnancy, etc." It is possible I may yet find that I have not made the first successful myomectomy upon the pregnant uterus, but so far, I am proud to be able to claim priority for my native state in this direction. The patient, Mrs. Pauline A., 27 years of age, primpara, was brought to my office in November, 1899, by Dr. S. D. Smith, of Cowgill, Mo. I had several examine her with me, and Dr. Smith had others do this, for her condition seemed to be rapidly growing worse and worse, and her distress called for action. Myomectomy as described by Howard A. Kelly was performed on the patient Nov. 27, 1899, at the hospital, before the class of the Women's Medical College, assisted by Drs. T. B. Thrush, B. L. Sultzbacher, Nannie P. Lewis and others. The uterus was in the sixth month of gestation, and the tumor, as large as a large orange, was situated superior and anterior to the tube on the right side. An incision in the linea alba, nine to eleven inches in length, was made to allow the extrusion of the entire gravid uterus and its appendages. The tumor did not involve the Fallopian tube, but projected out from the uterus like a large knot on a log. The serious complications liable to arise from an effort to remove the solid fibroid tumor were not underestimated, but were well considered. The rapidly failing health of the patient, the great distention of the abdomen, in

fact the congeries of conditions present in the case were rather dazzling, but the relief of the patient was imperative, something had to be done and as instantaneously as possible. A mistake in diagnosis led to the operation, as the tumor was supposed to be occupying the tube, and not connected at once to the uterus proper. The child could be plainly felt in motion beneath the thin walls beyond the growth. Realizing the situation, the question was hurriedly raised as to a complete hysterectomy, but as the operations of that character within our knowledge and experience had all proved fatal at this advanced stage of pregnancy, it was interdicted; so but one of two things remained for us to do instantly, either return the entire mass and try to close the abdomen, or try to remove the growth from the wall of the uterus and return what was left. I at once made an incision over the dense growth, about five or six inches in length, in the uterine muscle wall, and quite rapidly hulled out the tumor, leaving free hemorrhage to contend with at a limited area of the surface exposed. Very deep sutures were used to control the bleeding, and the opening in the uterus was closed with interrupted sutures; over the outside of this closed incision I laid a strip of iodoform gauze, one end of which I left exposed on closing the abdominal incision. The fourth day, I removed this gauze and on the twenty-eighth she was allowed to go to her home at Cowgill, Mo., forty-five or fifty miles distant. She was confined at full term, March 11, 1900, just 3½ months after the operation. Dr. Geo. B. Cowley, who attended her, wrote that mother and child were doing well and that delivery was made without forceps, as I had advised, for fear of a rupture of the organ in a prolonged labor.

One point I wish to call attention to as regards the relation of the placenta to the tumor, viz., the placenta seemed to have its attachment immediately beneath the growth, for on all other parts of the uterus it seemed as thin and yielding as a bladder. In fact, the thinness of the walls of the organ was a great surprise to me, and the psychologic effect made on me during the process of manipulation is permanent. There were no points in connection with the convalescence worthy of special mention. The patient's condition seemed to improve continuously after the shock of the operation had passed off. She took chloroform poorly, which was an additional source of uneasiness, but she rallied from it during the first thirty-six hours, after which all was well, and an uninterrupted recovery followed. A little over a week since—May 7—a letter from the patient's physician, Dr. Cowley, says: "I saw the baby yesterday—about two months old—mother and child well."

Tenth and Walnut Streets.

# Therapeutics.

### Treatment of Rheumatic Diseases of the Heart.

In the treatment of acute rheumatism in the adult, Sansom administers sodium salicylate in 20-gr. doses, with 5-gr. doses of ammonium carbonate, or 20-minim doses of aromatic spirit of ammonia in an ounce of camphor-water, every two hours until six doses are taken, or until the temperature has fallen and the pain is eased. Subsequently, the administrations are reduced to every six or eight hours. With this mixture may be combined alkaline carbonates, especially sodium carbonate, in 20-gr. doses. Any recurring wave or storm of the disease is treated in the same way as the earlier symptoms, and the treatment is kept up from three to six weeks. In some cases sodium dithiosalicylate may be employed in 3-gr. doses every eight hours in cachet or chloroform-water, with extract of licorice. In the treatment of rheumatic pericarditis, an ice-bag may additionally be suspended over the heart for a long period. Failing cardiac power is best treated by the frequent administration of ammonia and similar diffusible stimulants in small doses, with camphor-water, or the hypodermic injection of from 1/50 to 1/30 gr. of strychnin. The application of a continuous galvanic current in the areas of the vagi has seemed to be valuable in the treatment of the rheumatic heart and its more severe manifestations.—*The Lancet*, March 31, 1900, p. 923.

### Treatment of Tuberculosis with Sodium Cinnamate.

C. A. Ewald reports that he has not been able to secure as favorable results with cinnamic acid in the treatment of tuberculosis as he had been led to expect by Landerer. But at the same time they were sufficiently encouraging to warrant further tests of the "hetol." He is inclined to attribute Landerer's success to his general hygienic treatment, observing that more cases of phthisis recover by the natural factors, the innate healing powers of the organism, than is generally accepted.

### Hemoptysis.

Dr. M. E. Chartier, of St. Louis, writing in the *St. Louis Clinique*, says that he generally prescribes:

℞ Tinct. of iodin ..... ℥i
Camphoræ pulv.
Essential oil of tar, āā ..... ℥iiss
Hoffman's anodyne ..... ℥ss

M. Sig. Five to 20 inhalations at a time, to be repeated from two to four times daily.

### Thyroid Extract as an Emmenagogue.

At a recent meeting of the Liverpool Medical Institution, Glynn related that in many cases in young girls, in whom there was temporary amenorrhea or a delay in menstruation in consequence of slight developmental changes, the administration of thyroid extract in doses of 1/2 gr. once a day, generally given at bedtime, proved sufficient to re-establish or to institute the function of menstruation.—*British Med. Jour.*, No. 2050, p. 905.

### Purifying the Air in a Room.

In order to purify the atmosphere of the room inhabited by a phthisical patient the following may be plentifully and frequently sprayed:

| | |
|---|---|
| ℞ Guaiacol | 10 |
| Acidi carbolici | 6 |
| Eucalyptol | 8 |
| Mentholi | 4 |
| Thymoli | 2 |
| Ol. caryophl. | 2 |
| Alcoholis (95 per cent.) | 170 |

Mix and dissolve.—*Louisville Mon. Jour. of Med. and Surg.*

### Therapeutics of Adonidin.

Stern finds adonidin (*Merck's Archives*, May) of great value in "smoker's heart," where the beat suddenly becomes much stronger, indicating the increased cardiac activity from toxicosis. For the amelioration of this disorder he gives the glucosid in this form:

| | |
|---|---|
| ℞ Adonidin | .005 |
| Ammonium carbonate | .1 |
| Camphor | .03 |

M. et fiat. powd. xxx. Sig. One three times daily.

Adonidin is not a mere succedaneum of digitalis, for while the physiologic action of the drugs is identical to a certain degree, its prompt and energetic action makes it perfectly safe to use it in such pathologic conditions as fatty degeneration, pericarditis, simple hypertrophy, compensatory and certain atheromatous conditions, where digitalis, if given at all, should be used with the utmost caution. In rapidity of action, adonidin almost equals nitroglycerin, while in certainty of action it not only equals it, but surpasses spartein sulphate, caffein and digitalis. Its diuretic action is limited, being about that of digitalis, and its greatest diuretic force is ex-

hibited in conditions accompanied by dropsy and low arterial tension. Its action on the body is twofold; in a healthy individual it causes slight increase in temperature, while in a pyretic patient it lowers it, but there is no instance on record where it produced a fatal effect in man. The dose varies from .002 gram to .005 gram, taken three to four times a day, These smaller doses usually relieve the heart symptoms, and the largest—.01 gm.—acts on the edematous condition and produces diuresis.

### Sodium Chlorate in Gastric Affections.

Gastric affections treated with sodium chlorate, in daily doses of from 5 to 8 gm.—75 to 120 gr.—are said to be usually much benefited. Soupault reports that every variety of dyspepsia is clearly improved by it, and in cancer the pains, nausea and vomiting decrease or entirely disappear; the patient eats much more and with less digust, the hematemeses cease and the general condition improves. In gastric tumor, however no benefit was obtained. In chronic gastritis, no matter what the cause or anatomical form, the results were also appreciably good. The action of sodium chlorate is particularly excellent in hypersthenic dyspepsia, or hyperchlorhydria and in the conditions resulting—gastrosuccorrhea and gastric ulcer—exercising a lasting result. In the paroxysmic attacks so frequent in sufferers from hyperchlorhydria and ulcers the effects are particularly brilliant. In asthenic dyspepsia, however, the effect is doubtful or altogether insufficient. In the doses named no ill effects were ever observed even though the remedy was given for several months.—*Merck's Arch.*

### Alopecia.

℞. Resorcini ..... 3ii
Acidi salicylici ..... gr. xxx
Castor-oil ..... fl3i
Rectified spirit ..... fl3vi
Ol of bergamot ..... fl3i
M. Sig. Rub well into the scalp every night.

When greater stimulation is desired one may use:

℞. Mercuric chlorid ..... gr. xii
Betanaphthol ..... gr. xl
Castor-oil ..... fl3ii
Rectified spirit
Bay rum, āā ..... fl℥ii

—*Schamberg: Polyclinic.*

# Medicolegal.

**A "Man" in Legal Definition.**—Under the Wisconsin statute, which provides that "any man who commits fornication with a sane female of previous chaste character, under the age of eighteen years, shall be punished," etc., the Supreme Court of Wisconsin holds, in the case of State vs. Seiler, that the word "man" means a male person who has arrived at the age of puberty, or is capable of committing rape, and is not limited to a male person over the age of 21 years.

**One Thousand Dollars for Mistake in Message.**—A drummer, whose wife had been quite sick but was somewhat better, after having arranged for a telegram to be sent to him at a certain place to advise him of her condition, left home to follow his business. The message, "She is much better," was sent to him, but when delivered read, "She is no better." This he understood meant that she had relapsed and was much worse. It caused him great mental anguish, and to return home at once. Under these circumstances, a verdict for $1000 damages, the Court of Civil Appeals of Texas does not consider, case of Western Union Telegraph Company vs. Patton, sufficient to justify it in holding that the jury that returned the verdict was influenced by improper motives.

**Overcoming Presumption of Insanity.**—When insanity has been adjudged or once proved to have existed, it is presumed to continue. But this is not a conclusive presumption. The presumption arising from an adjudication of insanity may be overcome by proof other than an adjudication of restoration and consequently a recovery and sanity may be shown after an adjudication of insanity where no adjudication of restoration to reason has been made. So holds the Supreme Court of Kansas, in the case of Lower vs. Schumacher, where it further maintains that, this being true, a contract or conveyance made by one adjudged a lunatic, but who is in fact sane when it is made, is valid, although no adjudication has been made that he has been restored to his right mind.

**Physician Entitled to Have Office Heated.**—A physician, with an office in his residence, contracted for a furnace to be put in to heat his house. The stipulation was that it would heat the lower rooms at 70 degrees Fahrenheit in zero weather, and the second floor 65 degrees. However, under the best of usage and attention, the furnace furnished not only lacked the capacity to produce heat sufficient to make the house comfortable, but left the temperature in the office so low that it was impossible for the physician to treat his patients in that part of the house, and the office was of but little use to him during the winter season. The evidence showed that the rental value of this office was $10. Under such circumstances, and as it holds that it was within the scope of the agreement that the office was to be heated by the furnace, the appellate division, fourth department, of the Supreme Court of New York holds, Russell vs. Corning Manufacturing Company, that the damages arising from this failure were fairly chargeable to the furnisher of the furnace.

**Cards as Evidence Against Abortionist.**—In Commonweal vs. Barrows, a prosecution for abortion, exception was taken to the admission in evidence of certain cards found in the defendant's trunk, in the room occupied by him; also to allowing the district attorney to argue to the jury that the defendant, by the cards, advertised his business as that of an abortionist. But the Supreme Judicial Court of Massachusetts overrules the exceptions with the statement that it has no doubt that the cards were admissible in evidence, and that the district attorney was properly allowed to argue to the jury what their meaning was. It says that in such cases cards and circulars of a defendant have been held to be admissible in evidence if they tend to show that the defendant holds himself out as a person whose business it is to procure abortions. It is not to be expected that cards and circulars of this kind will state the fact in precise terms, or that their meaning will not be more or less disguised.

**Garbage Gathering.**—The Supreme Court of Michigan holds, in City of Grand Rapids vs. De Vries, that the gathering of garbage is not a trade or occupation in any proper sense, and such employment does not come under the doctrine in reference to monopolies, or in reference to legislation in restraint of trade. It is a matter in which the public agencies are authorized to pursue the best means to protect the public health. Wherefore it holds that the business of handling and carting garbage through the public streets of a city is a business which the municipality may regulate for the benefit of the public health. No person has the right to carry garbage or other refuse matter through the streets of a city in open vessels. It is not a creation of a monopoly when the city from year to year licenses one or more persons to cart such garbage from and out of the city, specifying how it shall be done.

**Dying Declarations in Abortion Cases.**—The Supreme Court of New Jersey holds, in the case of State vs. Meyer, that, upon an indictment framed under the provisions of section 119 of the crimes act of 1898, which charges the defendant with using an instrument upon the person of a pregnant woman, with intent to cause her miscarriage, and that the defendant's act caused the death of the woman, evidence of the dying declarations of the deceased is inadmissible. The reason given is that death is, in New Jersey, no longer in any case an essential element of the crime denounced, but is to be considered solely with respect to the punishment to be inflicted after conviction, which the court holds renders inadmissible the dying declarations.

**Calling One of Two Physicians as Witness.**—Although it has been held in New York state that, where two physicians together made an examination, and one was called to testify, the other should also be allowed to give his evidence, the appellate division, first department, of the Supreme Court of New York holds, that where two physicians have been employed

in succession, but not at the same time, and never attended or examined the patient together, his calling one of them as a witness, as for example the last employed, is not a waiver of his privileges as to the other, especially if such other really never examined his injuries at all—only gave him medicine. It also holds, in Tracey vs. Metropolitan Street Railway Company, that where a physician who had been called in by the plaintiff was put upon the witness stand by the defendant, the plaintiff had a right to demand that it should be shown at the outset who had called in this physician, in order to raise the question whether he was disqualified for testifying against the plaintiff, and to determine the attitude he occupied.

**Cards as Evidence.**—An indictment charged the commencing at a certain time of the practice of medicine and surgery in the state of New Jersey, without license, by then and there prescribing for a certain named person a certain medicine, etc. A business card of the defendant, containing his name, with the title "Dr." prefixed, and advertising himself as pharmacist and chemist, and with having a free dispensary at his place of business, where registered physicians were in attendance daily to give medical and surgical advice free of charge, after being identified by him, on cross-examination, as having been put into circulation by him within two years previous to the date of the offense charged, was admitted in evidence over his objection. This, the Court of Errors and Appeals of New Jersey holds, Mayer vs. State, was not error. It holds that the card was admissible as a declaration of the defendant tending to prove that he had been engaged in carrying on the prohibited business, which was corroborative of the proof offered in support of the offense charged. Besides, the statute on which such indictment was based declared, among other things, that the use by a person of the title "Dr.," "Doctor," etc., or the exposure of a sign, circular, advertisement, or any other device or information indicating thereby the occupation of the person, should be considered prima facie evidence. Wherefore, the court holds that it was not erroneous for the trial judge to charge the jury to the effect that the card which the defendant gave to the prosecuting witness, along with the bottle of medicine, on which his name appeared as Dr. (naming him), was, under the act, prima facie evidence to the jury that he was practicing medicine, or holding himself out as practicing medicine, at that time.

**Dental Law Sustained.**—Section 5 of chapter 378, Maryland acts of 1896, reads: "Any person twenty-one years of age, who has graduated at, and holds a diploma from, a university or college authorized to grant diplomas in dental surgery by the laws of any one of the United States, and who is desirous of practicing dentistry in this state, may be examined by said board (state dental board of examiners) with reference to qualifications, and after passing an examination satisfactory to the board, his or her name, residence or place of business, shall be registered in a book kept for that purpose, and a certificate shall be issued to such person. Any graduate of a regular college of dentistry, may, at the discretion of the examining board, be registered without being subjected to an examination." This was attacked, in the case of State vs. Knowles, as containing the vulnerable points in the state dental law, rendering it invalid. It was argued that as the word "may" occurs twice in the section, and that as there could be no question that in the latter sentence it was employed in the usual and natural sense, the same sense must necessarily and unalterably be impressed upon its employment in the first sentence. Such being the case, the contention was that the board might, if it chose, refuse to examine one holding a diploma from a college or university authorized to grant diplomas in dental surgery, and could thus arbitrarily deny the right to practice dentistry in that state, to any one holding such diploma, however skilled in his profession, or however qualified to pass an examination. But the Court of Appeals of Maryland says that the law does not permit itself to be frightened out of its propriety by the hobglobin of inconsistency, and that it itself has no hesitation in holding that the only discretion conferred is to waive an examination when the applicant is a graduate of a regular college of dentistry, and that in all other cases covered by the act examinations must be granted when application is made in accordance with reasonable rules as to time and place. In other words, it construes the first "may" as shall" or "must," while it says that the latter "may" is required to be used in the permissive sense because it is expressly coupled with "discretion." Furthermore, it thinks the act does mean to distinguish, for the purpose of examinations, between "a college or university authorized to grant diplomas in dental surgery" and "a regular college of dentistry." In the former, it says, by way of justification, dentistry may be but an adjunct to the course, and there is no assurance of thoroughness of instruction and practical application, as must be presumed in a regular dental college, where the whole time of the students and instructors is given to the theory and practice of dental science. The principle underlying this discrimination has been recognized in numerous cases where the authority to determine what colleges are "reputable and in good standing" has been held not to be an arbitrary or unreasonable authority. With reference to the criticism that the language "may be examined with reference to qualifications" was so vague and indeterminate as to be fatal to the validity of the law, the court answers that it might well have been more specific, but that it is impossible to suppose that it refers to any other qualifications than those appropriate to and requisite for the practice of dentistry. And so the court holds the law constitutional, stating, too, that the same reasons which apply to the profession of medicine apply with equal force to the profession of dentistry, which is but a special branch of the medical profession.

**Proof of Sickness and Insanity.**—According to the Supreme Court of Alabama, it is competent for a non-expert witness to testify that a person is "sick," "diseased," or "has a fever"—these being statements of such facts as are perceptible to the senses, and not mere expressions of opinion. But it is not competent, the court says, in the case of Dominick vs. Randolph, for such witness to testify, if the evidence sought calls for an opinion instead of a statement of fact, until the witness shall have placed himself within the rule as to expert testimony. To state that a person is sick or diseased is a statement of a fact which does not necessarily involve professional knowledge or skill, but to state the particular kind of disease necessarily involves some degree of professional knowledge and skill, and consequently the expression of an opinion. To state that one has a fever is a statement of fact perceptible to the senses of the ordinary man, which it does not necessarily require the knowledge or skill of an expert to determine; but to say whether the patient is suffering with malarial or yellow fever would require the knowledge and skill of an expert, and necessarily the expression of an opinion. Moreover, the court draws the line in this case at allowing non-experts to testify as to a person having suffered with a stroke of paralysis. Indeed, it suggests that the propriety of excluding such testimony was well illustrated right in this case, where it thinks it quite probable that what the only expert witnesses offered described as rheumatism the non-expert witnesses supposed to be paralysis. Where insanity is a fact in issue, it holds that the testimony of non-experts may be admitted, where it is shown that the witness has had long and intimate acquaintance with the person in question—this long and intimate acquaintance in contradistinction to a casual acquaintance and occasional conversations and interviews—to enable the formation of a correct judgment as to the mental condition of such person. A mere speaking acquaintance, with occasional conversations, the most of them of very recent date, it insists, does not qualify a non-expert to testify upon the question of sanity or insanity. To test the sincerity of a non-expert witness who has brought himself within the rule qualifying him to testify with reference thereto and has testified to the insanity of the person in question, the court holds that he may be asked, upon cross-examination, whether such person was capable of making a deed at a certain time, although this calls for an opinion or conclusion. But the fact that a man made an improvident bargain; that he is generally unthrifty in his business or unsuccessful in one or more enterprises, the court does not consider of itself proves him to be a non compos mentis.

# Societies.

## COMING MEETINGS.

Oregon State Medical Society, Portland, June 20-27.
Second District Branch of the New York State Medical Association, Schenectady, N. Y., June 28.

RHODE ISLAND MEDICAL SOCIETY.—The eighty-ninth annual meeting of this Society was held in Providence, June 7. Five new members were added.

ELKHART COUNTY MEDICAL SOCIETY.—This Society met in Elkhart, Ind., June 6. H. O. Statler was elected president, and John C. Fleming, vice-president.

SALINE COUNTY MEDICAL SOCIETY.—At the recent meeting of this Society, held in Marshall, Mo., June 13, the following officers were elected: president, G. A. Richart, Blackburn; vice-presidents, B. C. Bradshan, Arrow Rock, and W. G. Fisher, Marshall; secretary, D. F. Bell, Marshall.

NEW MEXICO MEDICAL SOCIETY.—At the annual meeting of this Society, held in Santa Fe, June 7, the following officers were elected: president, J. H. Sloan, Santa Fe; first vice-president, J. W. Hope, Albuquerque; second vice-president, George C. Bryan, Alamo Gordo; third vice-president, J. A. Rolls, Watrous; secretary, J. Frank McConnell, Las Cruces; treasurer, G. W. Harrison, Albuquerque. Alamo Gordo was selected as the place of the next annual meeting.

NEW JERSEY STATE MEDICAL SOCIETY.—This Society held its 134th annual meeting in Atlantic City, June 5. The following officers were elected: president, William Pierson, Orange; first vice-president, J. D. McGill, Jersey City; second vice-president, E. L. B. Godfrey, Camden; third vice-president, Henry Mitchell, Asbury Park; secretary, William J. Chandler, South Orange; treasurer, Archibald Mercer, Newark. The next meeting will be held in Allenhurst.

MASSACHUSETTS MEDICAL SOCIETY.—The 119th annual meeting of this Society was held in Boston, June 13. The board of councilors elected the following officers for 1900-1902: president, Frank W. Draper, Boston; vice-president, W. W. Eaton, Danvers; treasurer, E. M. Buckingham, Boston; corresponding secretary, C. W. Swan, Brookline; recording secretary, F. W. Goss, Roxbury; librarian, Edwin H. Brigham, Brookline. The annual Shattuck lecture was delivered by Dr. William H. Welch, of Johns Hopkins.

## Associated Health Authorities and Sanitarians of Pennsylvania.

*Seventh annual meeting, Mechanicsburg, May 28.*

### SCHOOL HYGIENE.

PROF. J. A. BEITZEL, principal of the public schools, spoke on this subject, saying that only recently has it dawned on the people that the trend of the educational forces is too exclusively in the direction of a single order of culture. Every energy has been bent toward the intellectual part, without thought as to the physical. A sound mind in a sound body has not inspired the administration of public school affairs. Laws of health are violated in improper buildings, improper heating, lighting, ventilation, and want of sanitary surroundings, and by taxing the eyes and the mental powers. He alluded to the great care of the ancients in regard to the body of the growing citizen, and said that school hygiene must ever be considered if we want healthy as well as cultured children. There must be proper sites for the building, good drainage, avoidance of bad air, the cesspool should not receive the school drainage; proper ventilation and heating should be secured for the health for the pupils, and overcrowding in the rooms should not be tolerated. All these cause tired nerves, headaches and mental exhaustion. Five hundred children assembled in one room for two hours produce carbonic acid gas equal to the solid charcoal or carbon in twenty pounds of coal. These would give off in that time, vapor equal to four gallons of water, this being laden with impurities from ill-ordered mouths, decaying teeth and the natural waste from the mucous linings of the air-passages. In addition, the skin is continually throwing off waste products even in the case of the cleanliest. Imagine the condition of a child who has not had a bath perhaps for six months; think of the exhalations from such bodies, from the dirty clothing, and the usual wraps in the cloak-room. What a soil for the development and propagation of scarlet fever, diphtheria, etc! Again, we have overheated school-rooms and the children are allowed to rush out into the cold corridors or yards, so it is not strange that quinsy, croup, bronchitis, etc., are prevalent.

To know what is the proper air-space for each occupant is vastly important and we have differences of opinion on this point. Dr. Chapin insists on 12 to 20 square feet of floor space and 200 or 250 cubic feet of air-space according to age and development; Dr. Newsholme maintains that 2000 cubic feet of pure air are required per hour for each pupil; the English educational department gives only 80 cubic feet as the minimum space, and 8 square feet of floor space; the New York Board of Education prescribes 70 cubic feet of air-space for the lower classes, and 80 for the higher. With all these views, however, one thing is obvious: we must remove the foul and furnish an abundant supply of fresh air and a liberal air-space, or we do not provide for the health of the children. The air must be changed without drafts, and superheated air must be guarded against, for not only is the air thus made less valuable, but it is too dry, and will abstract moisture from the skin and lungs, causing a feverish state. Proper lighting of the school-room is necessary, or the eyes will be injured, and here we need the sanitary expert and the architect. All teachers know the depressing effect of cloudy, sunless days, and a dull, dark room. The direction in which light enters the room is of supreme importance: when full in the face, it is fatal to eyesight; while light from behind throws the shadow of the body on the book, and from both sides throws a double set of shadows, but from the left and from overhead windows it falls directly on the desk. Some claim that from each desk there should be visible a strip of sky at least 30 cm. wide, measured from the top of the window. It has been observed that there is a progressive tendency to myopia in school children, due to the nature of their work and the defective illumination, and that near-sightedness increases from the lower to the higher grades. The inference, from a number of observations, is that the children of those nationalities most commonly engaged in study and eye work have the greater proportion of myopic change, while those accustomed to outdoor life and resting their eyes largely on remote objects are generally free from this affection. Better lighted buildings show a less proportion of myopia, and observation shows that the ratio of children wearing spectacles is progressive, indicating that eye-strain is due to insufficient or excessive light, glaring and conflicting lights, that from the wrong direction, too long use of the eyes without change of focus to distant objects, too small type in print, reading from the blackboard at too great a distance, and bad position of the body assumed in the execution of the slant system of penmanship, causing spinal curvature as well as defective vision. Other phases of school hygiene of importance are improper seating, overcrowding, overwork, lack of exercise, too long sessions, nervous disorders, epidemics, and infection from books.

### HYGIENE IN THE RURAL SCHOOLS.

DR. BENJAMIN LEE, secretary of the State Board of Health, said that fortunately for the health of school children, school directors have not hesitated to interpret the phrase "general supervision," in the law which assigns their powers and duties, in a very generous and liberal fashion. They have determined the number of schoolhouses, their size, comfort, ventilation, etc. While it will be recognized that every one of the above features of educational supervision has its bearing on school sanitation, yet in none does the protection of health appear as the direct object. But in section 110, this motive is recognized: "suspension is the separation of the pupil for a limited time from the school, it may be either for bad conduct or for sanitary measures." This may be done without calling the board to meet, and the teacher is thus made a medical inspector for

the school. In some instances, we find a compulsory vaccination regulation, as in Philadelphia; but systematic medical inspection should be the rule. Decisions have been made by certain judges deciding positively as to the equity of this proceeding.

He referred to an act to provide for the restriction of communicable diseases, since issued as the Pennsylvania Sanitary Code. Schools were recognized as the great centers of infection for the propagation of disease, and this act is to raise every barrier against the spread of infectious diseases in every way. It applies to all schools, public, private, parochial, and Sunday. Decisions have been made that now settle the law. The legislature's last attempt was to encourage school boards to assume responsibility for the sanitary care of the children, by an act to empower the school directors of the several townships to exercise the powers of a health board for the township.

THE RURAL DIRECTOR AS A HEALTH OFFICER.

C. HERBERT OBREITER, Lancaster, gave some information in regard to his township, which is a small one with a population partly rural and partly urban. The school board organized as a board of health in the simplest way, as diphtheria was prevalent in the district and a few cases came within jurisdiction; no additional officers were elected; they required teachers as well as physicians to report cases of which they might learn, and by requiring the local director to placard houses which were infected, these remained quarantined until danger was passed. A fine of $10 was announced for breaking quarantine. This slightly increased the duties of the director, making him a sanitary officer, but made no new demands on the district's funds. The city board furnished formaldehyde for fumigation, at cost; antitoxin was needed by one poor family, and this was furnished from the school funds, and the action was not questioned by the auditors. All children from infected houses were dismissed, and all articles handled by these patients in school cremated. No opposition was encountered, but commendation was given, for the people recognized that it was their protection that was being considered. He thinks the legislature did well in reposing this trust in the school directors, as no class of men are less influenced by improper motives, or are more earnest in the discharge of duty. This act confers unconditional power and leaves no choice to reject it entirely. Its greatest defect is the absence of a penal clause; all know fines are often futile, and this is the weakest point. Only one remedy is suggested—that is, making the appointee a special sanitary officer.

The rural director in his new capacity is invested with the widest power, undefined by any court, and he may abate a nuisance, even invade private property to do this, without contravening the owners' constitutional rights in so doing. The act is simply a necessary exercise of police power, and he may isolate, and control the liberty of afflicted persons, virtually excluding them from all communication with their fellow beings. As a health officer he can not be sued in tort, and he is not liable for mere errors of judgment, so long as he acts within his jurisdiction.

MEDICAL INSPECTION IN SCHOOLS.

MISS DORA KEEN, secretary of the Public Education Association, said that classes should not have more than a maximum enrollment of forty-five to a teacher, as more cause impure air, crowding of desks and lack of individual attention by the teacher. She remarked also that standing movements are invaluable in the training of a child, and that these should be a part of the daily program, and the play instinct should be utilized in games. Medical inspection has done very much to reduce the number of detentions by sickness. Daily visits should be made, as very many are found suffering with nose, throat, or ear affections, sore eyes and defective vision. In one instance the parents were asked to meet the inspector and nearly five hundred came,

BENEFITS OF SANITARY WORK.

DR. A. C. ABBOTT, president of the State Board of Health and bacteriologist of the city of Philadelphia, made the annual address and spoke of the benefits obtained from sanitary work; he considered in detail filtration of bad water and bacteriologic examinations for the profession.

MILK-SUPPLY.

M. C. LIPPERT, Phœnixville, read a paper on "What Can be Done for the Protection of the Public From the Danger of the Dairy?" He spoke of the influence of milk as an article of diet on the health and mortality of children and infants. He said that lack of proper supervision and inspection by the state is responsible to a great extent for unsanitary methods in the dairy and the sale of milk from unhealthy or diseased cows; and that while we have a dairy and food commissioner, no provision is made by law for dairy inspection. The State Live Stock Sanitary Board is doing efficient work for the eradication of tuberculosis among cattle and other contagious disease also, but its work, owing to the vastness of the field, is necessarily limited to the inspection of animals on application of owners of dairy herds, and they have nothing to do with dairy inspection proper. The legislature should enlarge the duties of the dairy and food commissioner, by making systematic inspection of dairies and dairy herds obligatory throughout the state, and providing the necessary means and assistance by trained veterinarians. The legislature should further enact a general law, making a standard for all milk and providing for the prevention of adulteration and sale of impure milk, and investing local boards of health with full powers to inspect milk as well as dairies, and require certificates of inspection in the case of all milk sold within their jurisdiction.

NEED OF HEALTH SUPERVISION IN TOWNSHIPS.

DR. ROBERT MAISON, county medical inspector, discussed the various steps taken by the State Board of Health and its friends to give local health protection throughout the state. The efforts resulted in establishing boards of health in cities of the third class and boroughs, and finally school boards in townships are authorized to assume the functions of a health board. He claimed that borough health boards in the smaller villages are not efficient, because of local antagonism, the dearth of proper material for membership, the personal element injected into every effort to abate nuisances, the lack of interest among the members themselves, the deficiency in hygienic knowledge and the constant changes in the personnel of the boards. He argued from this that to establish boards in townships would be inadvisable from the same reasons that now render those of the boroughs of little value, and that the sparsity of population would make township boards of much less use. He spoke of a borough where 4 per cent. of the population suffered from diphtheria last winter, and the local board was afraid to abate nuisances caused by a manufacturing firm giving employment to the majority of the inhabitants, for fear of reprisals. He advocates legislation providing for a county health officer with deputies in each township, in order that all cases of contagious disease may be promptly quarantined and epidemics thus avoided. He said that such a bill would pass if the members of the legislature were allowed to suggest the appointees for the deputy health officers, because no bill, however meritorious, can be passed unless the members of the legislature receive some pecuniary or political benefit through it.

DANGER THAT ARISES FROM THE LACK OF RURAL SANITATION.

DR. H. B. BASHORE, West Fairview, said that in many cases the large cities are well protected from preventable diseases, while little is done for the rural districts, yet it is a pressing need for the welfare of the cities as much as for the districts themselves. The fact is being rapidly realized that it is more healthy in the average large city than in the country, because in the latter place, for many years filth has accumulated, and wells have been fouled; this in turn causes pollution of the water-supplies of the cities. Typhoid fever is carried from such a place, which has been fouled by the admission of the germ from the cesspool, to the well. This in turn is carried to the larger supply, and it is difficult to make the people understand that a well which has given water for so many years without bad results has now become dangerous. Again, the milk-supply to

the city may come from a place where the old well is used to furnish water to the cows, and thus the milk be dangerous. Workmen engaged in building roads, etc., accumulate filth in their camps, ride in the crowded cars, and carry scarlet fever from their own families to others. Diphtheria is continually carried in this way, by women going out shopping from homes where it prevails. No public funeral is allowed in certain cases, yet the friends meet at the house and go from it, with garments loaded with germs, to use the cars, both steam and trolley, and thus spread the disease. Swamps are a means for the production of disease, but no one realizes this danger; and while rural hygiene is thus neglected, in spite of the great work in cities, we must expect that disease will prevail. We must demand health officers for the country.

EPIDEMIC CEREBROSPINAL MENINGITIS.

DR. D. R. MCCORMICK, Lancaster, read a paper on this subject, in which he said that the first case reported this year was on March 15, the last on June 21; total 118; mortality, 67 per cent. During that time 103 premises were infected, 12 of which had more than one case. Lancaster has a population of 45,000; no cases occurred among the 700 Russian Jews; 1500 negroes, or 100 Italians. Though unsanitary conditions were found in four-fifths of the infected homes, few could be called very bad, though poor ventilation, slight defects in plumbing, drainage, filthy gutters, and proximity to dumps were common. Personal habits were good and there was no overcrowding. It attacked all classes, but few were among the very wealthy or very poor, and no section of the city was exempt. Occupation was not a factor, nor was age. The attack began in the spring, after a severe winter, yet it reached it height in April, during a period of dry warm weather. Contrary to expectations, it declined rapidly in May, and by June had almost disappeared. Its malignancy was shown, not only by the mortality, but by the rapidity of the occurrence of death. After the invasion 60 deaths occurred within five days, and 46 in less than forty-eight hours. No infection was shown nor any connection between cases, the first two being two miles apart. How it was introduced has not been discovered. Sanitarily, Lancaster is elevated, well-sewered, well-drained, has no tenements, but a small foreign population, is free from overcrowding, nuisances are rare and sanitary laws enforced. Aside from its water-supply, the city should not have proved a good field for conditions usually believed to be factors in this disease. Until March no special attention was paid to the disease, save to advise that caution be used by undertakers and families. Near the end of that month, the sudden death of a young man was reported, death occurring in twelve hours after the onset. Inspection was made, a private funeral ordered, and the body interred within thirty-six hours. At a special meeting of the Board, the citizens were urged to a strict enforcement of sanitary discipline, and not much more notice was taken. However, after a correspondence with other boards they unanimously declared the disease contagious, placarded the houses, and enforced all rules as to private funerals, etc. The replies from health boards and others showed a marked diversity as to whether or not the disease was contagious or infectious, etc. A careful study of the epidemic shows no apparent source of contagion; as only isolated cases occurred, the disease was not confined to any locality, contact did not cause the disease, and it appeared simultaneously in various places widely separated. Its contagious nature was shown in the fact that there were twelve places where more than one case occurred; that persons in attendance in three cases took the disease; that cold and exposure did not prove in any case a factor, and that in one instance the disease appeared to have been carried by another person who remained immune.

THEORY AND PRACTICE OF VACCINATION AND PRODUCTION OF BOVINE VIRUS.

DR. W. F. ELGIN, Glenoldden, explained the nature of immunity, whether natural or artificial; how vaccination prevents smallpox, and antitoxin, diphtheria. He also explained that this latter is not a poison, how it is produced and how it acts to make the person immune to the disease. He alluded to the various forms of disease germs and the plan by which they are rendered innocuous. He gave in detail the value of vaccination, as shown by statistics of the German army, etc., and the earnest belief of all civilized people in the certainty of thus stamping out the smallpox, by constant vaccination, of infants, revaccination at puberty, and during an epidemic; and the necessity of never giving a certificate that a person has been vaccinated unless from some positive data, the scar not always being reliable, as in so many instances this may not be from a true vaccination. He especially alluded to the great care to be taken in performing this little operation, the cleansing of the point of insertion, the use of clean sterilized instruments, and too much effort to make a big vaccination, for three small even points protect as well as several, and produce less annoyance by the sore produced. He showed how the glycerinized virus has been successful in a large number of cases over the old method of using scabs, points, etc.

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## Fourth District Branch, New York State Medical Association.

*Sixteenth Annual Meeting, Buffalo, May 8, 1900.*

*(Concluded from p. 1498.)*

PRESENT STATUS OF JONNESCO'S OPERATION.

DR. M. HARTWIG read a paper on this subject. It will appear in THE JOURNAL.

CHRONIC INTESTINAL ADHESIONS.

DR. CHARLES E. CONGDON read a paper on this subject, and reported four cases, some of which had required two or three abdominal sections to relieve the persistently recurrent adhesions of the bowel.

DR. FREDERICK HOLME WIGGIN, New York City, said that when he began to do abdominal surgery one of the first patients, who recovered from the immediate operation, died a year later from intestinal obstruction. At post-mortem the condition found to be present was so much worse than when he operated that he was convinced that the surgical technique in vogue at that time must be faulty. He noticed before long that where he opened the abdominal cavity and found a certain quantity of fluid there had been no adhesions. It was not long before he realized that intestinal obstruction following these abdominal operations was one of the greatest dangers with which to contend. Knowing that Halsted had found that saline solution did not irritate the contents of the peritoneal cavity, as was the case with ordinary water, he tried the plan of leaving some of the solution in the abdominal cavity, thus imitating Nature's method. He adopted this technique in 1891 or 1892, and soon noted with pleasure that these troublesome cases of intestinal adhesions were becoming less and less frequent until now he has no trouble with them. The accepted technique is to wash out the abdominal contents with the saline solution, being careful not to wipe off the parts, as this tends to form adhesions. He is in the habit of placing most of the stitches in the peritoneum, but not tightening them at this stage. As soon as the water comes away clear, he leaves the cavity full of saline solution, and closes the wound. By experimentation on dogs, he has found that the abdominal viscera can be subjected to considerable traumatism without giving rise to intestinal adhesions, provided this technique is observed.

DR. E. D. FERGUSON, Troy, said that so far as he knew he had not a single case of intestinal adhesions following the opening of the abdomen, though possibly others might have encountered it after the patient left his hands. This immunity from intestinal adhesions had not been the result of any special technique; however, there should be as little active inflammation in the abdominal cavity as possible at the time of the operation. There are three elements necessary to success: 1. the thoroughness with which the adhesions are separated; 2. the thoroughness with which all denudations, from stripping of the peritoneum, are repaired, and 3. the putting into the abdominal caity of a certain quantity of saline solution, that quantity to be gauged by its capacity. He recalled a case, seen in consultation, in which the second or third operation for intestinal adhesions was to be done. The operator was

about to dust the parts with aristol, at the close of this operation, as he had done in the previous ones. At this point, he advised him to desist, and to substitute for the aristol the filling of the peritoneal cavity with saline solution. He did so, and the woman made an excellent recovery, and has been troubled no more by intestinal adhesions.

DR. M. W. TOWNSEND, Bergen, said that he does three things in order to prevent adhesions, viz., 1, leaves no raw peritoneal surfaces; 2, leaves the abdominal cavity full of saline solution; 3, opens the bowels on the third day with a cathartic, and keeps up the catharsis. He is most careful also to avoid the administration of morphin.

DR. A. L. BENEDICT, Buffalo, spoke of the intestinal adhesions from a medical standpoint, and referred to a case in which there was only a history of pain, constipation and a previous operation, so that the diagnosis of intestinal adhesions rested only on these three points. In this instance, the diagnosis was confirmed by autopsy, but not infrequently these cases are wrongly diagnosed as appendicitis.

DR. E. J. MEYER spoke of cases of fulminating appendicitis in which it is necessary to insert drainage-tubes. He sees no way of preventing the formation of adhesions in cases of extensive peritonitis where drainage is required. Here one can not make use of the very valuable suggestion to fill the cavity with saline solution.

DR. M. HARTWIG said that in 1877 he met with a very severe case of intestinal adhesions, all of the coils of the bowel being matted together. He separated what adhesions he could and made an artificial anus. The result not being very satisfactory, he took the patient to a no less eminent surgeon than Volkmann, who, after keeping the case under observation for a few days, declared that nothing more could be done. This he mentioned to show the great strides which surgery has made.

DR. CHAS. E. CONGDON, in closing, said that for a long time he made it a practice to fill the abdominal cavity with saline solution with the object of preventing these intestinal adhesions, but that he failed in accomplishing this purpose. In his later and more successful cases, he has used as little fluid as possible, and employed aristol, which has seemed to prevent the formation of these dreaded adhesions. He cited a case of severe gangrenous appendicitis which he operated on, and in which at the operation, done subsequently for another purpose, he found absolutely no intestinal adhesions.

### HEPATIC SCLEROSIS IN NON-ALCOHOLICS.

DR. A. L. BENEDICT, Buffalo, read a paper on this subject. He said that the view is now generally accepted that there is a connective hypertrophy and a contraction of the liver. A study of the histories of 250 cases reveals the fact that 37 out of this number showed unmistakable and often extreme atrophic sclerosis. In only 4 cases has the diagnosis been made of hypertrophy, and only 1 of these has been a markedly alcoholic one. Those who lay great stress on alcoholism usually base their opinion on the statistics collected from hospitals where very many of the patients are alcoholics. Of the 54 cases of hepatic sclerosis reported in this paper, the number of total abstainers was 9, and of hard drinkers, 4, while the remainder were practically total abstainers. He believes that the poison, which irritated the liver, is often not alcohol, but acids and their organic compounds, produced by micro-organisms, the yeasts or bacteria, in the stomach or intestine. One experimenter had produced similar lesions in animals by the injection of indol, phenol, and similar substances, and C. A. Herter's experiments point in the same direction. It should be remembered also that hepatic sclerosis in the human being is a very slow process. He is at present engaged in a study of the length of time requisite for the development of such pathologic changes, and hopes in the course of ten or fifteen years to present some scientific conclusions based on an extended study of this subject.

### INJURIES OF TENDONS AND THEIR TREATMENT.

DR. WILLIAM M. BEMUS, Jamestown, considered this subject. The first case reported was one in which a young man while skating had had the left skate suddenly checked in its progress. This resulted in throwing the body forward, and putting the ankle suddenly in a forced extension, and in throwing the tendon out of its bed behind the malleolus. A second case of this kind was also narrated, in which dislocation of the tendon had been produced by sudden forced extension of the ankle. Manipulation seldom fails to reduce the dislocation, and it should then be fastened in place by a pad and roller bandage. The accident is usually accompanied by pain, tenderness, disturbance of function and local redness. The diagnosis may be uncertain if the tendon is deep-seated or covered by fat, or is obscured by much swelling.

### ECTOPIC PREGNANCY WITH SUBPERITONEAL RUPTURE.

DR. C. C. FREDERICK, Buffalo, reported three cases, in which there had been repeated hemorrhages, with consequent increase of growth of the hematoma until large tumors had developed. The first patient was a woman who had been ailing for about a year with abdominal pain, coming on in paroxysms. On abdominal section he found a tumor composed of concentric layers of blod clots, and finally a lithopedion, or fetus of about four months' development. Beneath the amniotic sac was a freshly formed clot. He drained the sac through Douglas' pouch and the patient made a good recovery. The second was a woman having a tumor as large as a pregnancy of seven months. She had suffered constantly. On opening the abdomen he found a similar mass of blood clots, and a fetus of about five months' development. She made a slow but good recovery. A third case presented a tumor extending very nearly to the ensiform cartilage. In this instance he turned out an ordinary basinful of clots and a six months' fetus. As the descending portion of the colon and the cecum formed a part of the sac, he acidentally tore through the colon. He then effected an anastomosis by means of a Murphy button. She did well for four or five days, but then developed a rapid pulse and vomiting. On reopening the abdominal cavity, he found that the button was all right, but the sac had sloughed and was leaking into the peritoneal cavity. The woman hung between life and death for two days, but eventually made a complete recovery. In none of these cases was he able to elicit any history of ectopic gestation, and the tumors had been supposed to be new growths. In cases in which the placenta was well developed he effected hemostasis by the use of purse-string sutures.

DR. E. D. FERGUSON exhibited a forceps for lifting up the uterus in ventral suspension. He said that in very obese patients, or in those in whom the diaphragm is making very active movements, it is difficult to insert the sutures in the uterus, and it was to facilitate this procedure that this instrument was devised. He also presented a very large director for use in vaginal hysterectomy, by the aid of which the broad ligament can be readily brought into view and controlled.

### TREATMENT OF TYPHOID FEVER.

DR. J. H. SACKRIDER, East Randolph, presented a paper on this subject. It will appear in THE JOURNAL.

DR. WILLIAM M. BEMUS said that he employs this method of treatment in his own practice, and with considerable success. He uses high enemata of cool water in which is dissolved a little sulphocarbolate of soda or of zinc; and also gives one of these sulphocarbolates by the mouth. This treatment he regards as an ideal one for typhoid fever. Although several authors now recommend giving solid food quite early, he is personally afraid of following such advice.

### COMMON BUT GENERALLY UNRECOGNIZED SYMPTOMS OF EYE-STRAIN.

DR. ELMER G. STARR, of Buffalo, read a paper on this subject, and it will appear in THE JOURNAL.

DR. A. A. HUBBELL said he agreed with most of the statements made by Dr. Starr, but while admitting that nervousness, irritability, headache, vertigo and indigestion often originate in eye-strain, he would remind those present that these symptoms may arise from other causes.

DR. F. W. ABBOTT, Buffalo, said that if there is a marked refractive error, by correcting this, relief will be secured. It is, however, in cases of slight refractive error, where it is necessary to strain the accommodative apparatus continually in order to secure good vision, that eye-strain is apt to develop.

### PAROVARIAN CYST.

DR. HERMAN E. HAYD exhibited a large parovarian cyst that he had removed four days previously from a woman, forty-five

years of age, who had presented all the useful evidences of ascites. Owing to her good nutrition he felt sure that there could be no tuberculosis, and no cardiac or renal trouble, and he therefore made a diagnosis of parovarian or ovarian cyst. The tumor weighed about sixty pounds, and contained about twenty-eight quarts of fluid. On the other side was a small but perfect parovarian cyst.

HEMORRHAGE AFTER CONFINEMENT, AND ITS TREATMENT.

DR. HERMAN E. HAYD, Buffalo, read a paper on this subject. It will be printed in THE JOURNAL.

RUPTURE OF SYMPHYSIS PUBIS DURING PARTURITION.

DR. GEORGE A. HIMMELSBACH read a paper on this topic. He said that this accident is a rare occurrence, and is said to be dependent on a previous softening of the joint; and also that it is probable that rupture of this joint occurs much more frequently in forceps deliveries than is generally supposed. Rupture of the right sacroiliac articulation also occurs, but it is rare for both sacroiliac articulations to rupture at the same time. In his own case, there has been no accompanying crack or snap, or the occurrence of sudden pain to indicate that it has taken place. Under such circumstances the occurrence of this lesion is made apparent when the patient gets out of bed, because of her peculiar gait. Union of the joint sometimes takes place in ten or fifteen days, but often several weeks are required. When this accident is known to have occurred, it is important to redouble antiseptic and aseptic precautions, as Duhrssen has reported thirty-three cases in which there has been suppuration of the joint. The best treatment consists in the application of a broad binder, extending from below the breasts to one-third down the thigh. In his own case it was nearly two months before the patient could walk, and then she could do so only with difficulty. When seen five months later her gait was even, but she still complained of pain in the region of the symphysis and of the right sacroiliac synchondrosis.

CASE OF PERFORATING GASTRIC ULCER.

DR. ALLEN A. JONES reported this case. His paper will appear in THE JOURNAL.

DR. DE LANCEY ROCHESTER expressed surprise that this ulcer existed without the presence of blood in the stomach washings, or in the vomited matter, and with the normal amount of free hydrochloric acid. He said that the case was interesting, and most unusual.

DR. WILLIAM H. THORNTON said that having been called to a severe case of hematemesis from gastric ulcer directly after a medical meeting in which a case had been reported of hemorrhage from the bladder checked by an injection of a solution of antipyrin, it occurred to him that it would be desirable to try the method for the control of gastric hemorrhage. He accordingly gave a dose of ten grains, and repeated it immediately after an attack of vomiting. The result in this case, and in several others, was very satisfactory.

THE NEW CHARTER OF THE STATE MEDICAL ASSOCIATION.

DR. E. D. FERGUSON, president of the New York State Medical Association, called the attention of the Branch to the fact that the State Association has been recently granted a charter, under which it will probably be found expedient to organize subordinate county associations. He said that the State Association is the only bond between the medical profession of the State of New York and the AMERICAN MEDICAL ASSOCIATION. The lines have been drawing more and more closely for a number of years past, and delegateship to, and registration in, the AMERICAN MEDICAL ASSOCIATION are now accorded only to those who are in direct affiliation with that association.

DR. FREDERICK HOLME WIGGIN, New York City, having been called on by the President for remarks and suggestions concerning the work of the State Association, spoke of the charter and the matter of reorganization. He said that while the tendency of modern times is for every line of business to organize, the medical profession has afforded a notable exception to this rule regarding co-operation. He first became impressed with the evil of this lack of co-operation by the attitude of the Legislature toward the medical profession in the matter of the abuse of medical charity. While a resident of Connecticut he was a member of the Connecticut Medical Society, and has been impressed with the superiority of their organization. Membership in the county organization brought membership in the State Society, and one set of dues was paid. The county associations sent delegates in proportion of one to ten to the State Society, and it is probable that this will be the plan of organization in the reconstituted New York State Medical Association.

In regard to the publication of the Medical Directory, he explained that it should be controlled by the medical profession in order to keep out objectionable advertisements, because it is important to every physician to have full information regarding himself in the directory, and to have the confidence of all it must be understood that this information is unbiased and trustworthy. In reference to the object of the Association, he said that it is the intention to make the new New York State Medical Association something more than a dignified scientific body, by taking up the matter of protecting physicians in the state against malpractice suits. It is not the purpose to form a trades' union, or to fight the public, but simply to stand together for the right.

By a unanimous vote the Fourth Branch decided to become a branch association of the newly organized State Association, and steps were taken to organize in the near future a subordinate county association in Erie County.

## Cleveland Medical Society.

*May 11, 1900.*

First Vice-President, Dr. J. B. McGee, in the Chair.

This meeting was devoted to the exhibition of pathologic specimens.

PATHOLOGIC SPECIMENS.

DR. C. A. HAMANN presented some. The first was an inferior maxilla on which, on the lingual surface, opposite the first bicuspid, there was on each side an exostosis. Being symmetric they possess possibly some morphologic significance. He was unable to say what they were. He also presented a specimen of humerus showing the supracondyloid process. The brachial artery, together with the median nerve, passes under it. It is the representative of a foramen present in some of the lower animals.

He showed a biceps muscle with four heads, three of which arise from the coracoid process, and presented another biceps which was double throughout its entire extent. He also exhibited a specimen of congenital dilation of the ileum at the position of the ileocecal valve.

A rare anomaly of the aorta was presented. In this specimen the right subclavian artery arises from the arch of the aorta beyond the origin of the left and passes behind the trachea and esophagus. This anomaly is due to the persistence of the right aorta.

He showed several mounted specimens of vermiform appendices and pointed out the fact that they demonstrate that it is quite impossible to feel the normal appendix by palpation. One appendix is large, curved, and has a mesentery extending to its tip, another is concealed in the postcecal fossa, and another adherent to the cecum through its entire extent, but the adhesions were normal and not pathologic.

DR. W. T. HOWARD presented the specimen of a heart and aorta from a man who was admitted to the Lakeside Hospital complaining of shortness of breath, indigestion and edema of his extremities. The clinical diagnosis was arteriosclerosis with chronic nephritis with cardiac hypertrophy. The next day the man was found dead in bed. A large amount of blood and some clots were found in the pericardium, and 4 cm. above the aortic valve there was a rupture of the intima and media, and there was a dissecting aneurysm running the entire length of the aorta. How long this had existed could not be said, nor could the cause of death be determined.

DR. R. F. WEIR showed two specimens of pelvic tumor in which twisting of the pedicle had resulted in infarction of the tumor. He also showed specimens of papillocystomata of the ovary, which he thought were formed from the germinal epithelium.

DR. W. T. HOWARD said that in most cases of cystoma the follicle is the point of origin. He was very skeptical about the

adhesions often found about the ovary and very greatly doubted whether they did any real damage.

DR. R. F. WEIR also presented a specimen of cancer of the cervix and one of uterine fibroid associated with fibroid of the ovary. In closing, he noted that physicians have been very much impressed with the fact that in practically every instance of pelvic inflammatory disease, from whatever cause, they found in the blood large numbers of eosinophiles. Their significance has not yet been determined.

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## National Confederation of State Medical Examining and Licensing Boards.

*Tenth annual meeting, Atlantic City, N. J., June 4, 1900.*

WORK ACCOMPLISHED UNDER THE KENTUCKY LAW.

DR. J. N. MCCORMICK, M.D., Bowling Green, Ky., used this as the subject of his presidential address, and said that to be really profitable, annual conferences like this should partake largely of the nature of experience meetings, where members may recount in sorrow to sympathetic ears insurmountable difficulties met or defeat suffered in their respective states, or, amid applause and congratulation, announce and explain progress in new legislation or court decisions, or growth in public sentiment in favor of scientific medicine as against the various forms of quackery and imposture. They might also be termed mile-stones on the highway of our advancement, about which representatives of all the states may gather temporarily to compare notes, and then return to the position each has really attained in the march, a few in the vanguard, with quackery under control, the majority, composing the main column, where charlatans and scientific physicians have equal legal recognition, and a considerable rear guard and straggling force, where charlatans and fads are exalted and the scientific physician is in constant danger from the undertow.

"I have been not a little amused in reading the self-complacent publications upon medical requirements issued by the Board of Regents of the State of New York, under whose benign authority quackery in all of its grosser forms flaunts itself with an effrontery seldom seen elsewhere, with the *Bulletin of the American Academy of Medicine*, which constitutes our medical aristocracy, or professional 'four hundred,' most of whose members come from states where an honest Doctor, if he behaves himself, stands nearly as well before the law as a 'Christian scientist' or an osteopath—I say I have been not a little amused to find that the latest revised, improved and duly verified editions of these publications put their own quack-ridden and fadridden states in classes 'A' and 'B,' chiefly 'A' or 'AA,' as to requirements, while Kentucky, within whose borders an itinerant or advertising doctor of any kind has not dared to show his face for years, is put down in class 'C', and away down at the bottom at that.

"Our law is very like those of most of the other states, and the good results attained have come from the method, or rather the methods, of administering it. The law leaves much to the discretion of the Board, which means that it is flexible and easily adapted to varying class and individual conditions. The preamble to the law sets forth prominently that its purpose is to protect the people from ignorant and unscrupulous charlatans, and it is administered with this sole aim in view. Accepting the opinion of the American Medical College Association that it takes four years of school training to make a safe doctor out of a properly educated boy, we have adopted this standard, and all schools whose graduates are to practice in Kentucky are required to conform to it. We aided cheerfully in forcing this measure of reform upon our own schools, to their great hardship and serious financial loss, and we propose to hew to this line, let the chips and angry remonstrances come from and fall where they may.

"In addition, recognizing the diploma as being only the applicant's pedigree, we investigate the qualities and character of the individual. We want not only smart fellows who can pass a technical examination, but above this, and, as we conceive, more important than even this, our law contemplates and provides for honest men, who will deal fairly and squarely with their patients. As we understand it the State has no authority to inquire as to names or methods of practice, or whether large or small doses, or no doses at all shall be used. But it can require, it should require, and we do require, whether a doctor calls himself an allopath, homeopath, osteopath, eclectic, or belongs to "the no-name series," not only that he be competent in his fundamental training, but that he shall be honest in his business methods.

"Nor does our supervision stop with the issuance of a license. Each applicant has sworn that he will practice honest and legitimate medicine—that he will not become an itinerant or an advertiser. Then we have a medical referee in each county as a shepherd for his flock. A deviation from honest methods is promptly reported and brings a letter of kindly admonition from the central office, which nearly always has the desired effect. All this is done quietly, kindly, in the interest of the individual as well as the profession and public, and to this constant attention to personal elements and seemingly unimportant details we attribute much of the effectiveness of our law.

"As a result of our established reputation for fair dealing with all classes and systems of medicine, every doctor in the state, regular, homeopathic and eclectic, worthy of the name, as well as most of our intelligent people and leading newspapers, are friends and supporters of our law. If adverse legislation is proposed they fly to its defense they importune their representatives and make their lives a burden until they promise to stand by the right, and then they see that they never get back as members if they fail to keep their promise. In a word, our law, being founded upon the right of the state to require training and honesty in those who desire to enter this life-saving profession, and being patiently and untiringly executed with an eye to these results alone, is a practical success in which the profession feels a justifiable pride.

"Much has been said at meetings and in the journals about the importance of reciprocity between the various states in the matter of medical license. From what has already been said you can readily understand why we can not seriously consider such propositions from other states under present conditions. From Maine to California, from the lakes to the Gulf, in all the centers of population, we find the 'Copelands,' the 'K. & K.'s' *et id genus omne*, who were run out of our state after tedious litigation many years ago. We do not want them back, and, therefore, can not afford to recognize state certificates from Pennsylvania, New York, Illinois, or other states which give them the right to practice, and where they flourish like the green bay tree.

"We still look upon our work as in the experimental stage. It took four hundred years of constant struggle for our English ancestors and brethren to reach their present standards, which are yet far from ideal. For eighteen years after the enactment of our first law we made little more progress than did Sisyphus with his rock. All that we claim now is that we have laid broad foundations upon which those who come after us may safely build."

CO-OPERATION OF THE MEDICAL PROFESSION WITH THE NATIONAL CONFEDERATION OF STATE MEDICAL EXAMINING AND LICENSING BOARDS IN ESTABLISHING INTERSTATE RECIPROCITY FOR THE LICENSE TO PRACTICE MEDICINE.

DR. EMIL AMBERG, Detroit, Mich., advanced the idea that if a majority of the members of the medical profession of the United States should unite in demanding reciprocity, it would be granted. In order to obtain true reciprocity it is necessary to demand greater uniformity in medical education. This can be accomplished only by reducing the number of medical schools. Private institutions of this nature are a mistake, and medical education should be under the care of the government. The lay press of the country can be depended on to second improvements in medical laws, if they are convinced of their real utility for the general public. This was the experience in Michigan when, in the absence of any law for the regulation of medical practice, the lay press took up the battle of the regular practitioners for the protection of the people from quacks. Experience teaches that it requires great efforts on the part of the medical profession to educate the lawmakers and the public, in order to convince them of the usefulness and

necessity of changes. We are just entering on the hygienic century. America will take her proper place in the great advance in medicine that is about to come only if her practitioners really possess the merit they are supposed to have.

DR. CHARLES A. GROVES, East Orange, N. J., followed with a paper entitled, "Associate Medical Examining Boards." The author spoke in favor of associate as opposed to separate examining boards, on the ground of simplicity, effectiveness, and general adaptability to the needs of the work.

DR. HENRY BEATES, JR., Philadelphia, gave a brief review of the medical curriculum of the United States with special reference to its defects, and indicated modifications, as demonstrated by the state medical examinations of Pennslyania. What is essential is, first, an adequate curriculum, properly administered. Secondly, only such students should be permitted to matriculate as are beyond all question possessed of proper preparatory education. These essentials will exist only when the medical college reigns supreme as the legitimate center of medical culture and is equipped with properly trained professors, perfected laboratories with apparatus, and competent instructors, who are men of merit, and when the public is educated to the point of being able to recognize real worth, and refuses to any longer tolerate the gilded farce which has determined the existence of medical legislation.

RECIPROCITY IN MEDICAL UNIFORMITY.

DR. W. A. SPURGEON, Muncie, Ind., offered a resolution providing for a committee to suggest ways and means for the establishment of interstate reciprocity in licensure for the practice of medicine and for uniformity in medical education.

In the discussion, DR. WILLIAM WARREN POTTER, Buffalo, N. Y., said that the Confederation is the only one of the many organizations, the members of which were officially recognized by state governments. It is important not to derogate from their official positions. The question of advising legislatures as to enacting reciprocity laws should come last. Uniformity in medical education is at present the one thing to be sought. When this is secured, reciprocity will naturally follow. Uniformity in medical education can be advanced by the Confederation of Examining Boards and that of the medical colleges working together. Conference is needed, not hasty action. The motto should therefore be "*festina lente*."

DR. JAMES A. EGAN, Springfield, Ill., thinks it is useless to hope for uniformity in legislation. It is impossible to convince legislatures of the crying needs of their own state. A law to regulate the practice of medicine comes back from the legislature so mutilated and amended as to be scarcely recognizable. Under the existing laws much can be done toward remedying the present situation. He stated that the Illinois State Board of Health has passed a resolution to accept the licenses of other states that comply with their regulations, and in so doing the Attorney-General says that the Board has not gone beyond its powers. Other State Boards can follow this example. The courts can be depended on to favor public utility in the interpretation of the law, and reciprocity is distinctly of this character.

DR. E. B. HARVEY, Boston, said that it is useless to hope that any committee can influence legislatures to give up their individuality. States will not accept the standards of other states. There is often no reciprocity even in the public schools of different cities of the same state. It is a chimera to look for reciprocity. Uniformity in medical legislation should be the watchword.

DR. J. N. MCCORMACK, Bowling Green, Ky., said that the discussion on reciprocity reminded him of a country inn with screens to keep out flies, which really kept them in. Many states seemed willing to have reciprocity so as to get rid of their surplus medical men. Each state should keep down quackery by stringent laws. What is needed most at this time is a committee that will report and weed out "paper" colleges. Information as to the status of such colleges would be most welcome to medical examining boards and be very helpful.

The following committee on interstate reciprocity and uniform medical legislation was appointed: Dr. W. A. Spurgeon, Muncie, Ind., Chairman; Dr. Gardner T. Swarts, Providence, R. I.; Dr. Emil Amberg, Detroit, Mich., Secretary; Dr. Augustus Korndoerfer, Philadelphia, and Dr. E. B. Harvey, Boston.

DR. N. R. COLEMAN, of Columbus, Ohio, discussed the matter of the steps to be taken to establish a uniform standard of preliminary requirements in accordance with the recommendations contained in the report of the committee on minimum standards, adopted June 5, 1899. The subject was further discussed by Drs. William Warren Potter, Buffalo, and Augustus Korndoerfer, Philadelphia.

The officers of the National Confederation of State Medical Examining and Licensing Boards for the ensuing year are as follows: President, Dr. J. N. McCormack, Bowling Green, Ky.; vice-presidents, Dr. N. R. Coleman, Columbus, O., and Dr. James A. Egan, Springfield, Ill.; secretary-treasurer, Dr. A. Walter Suiter, Herkimer, N. Y.

## Philadelphia Pathological Society.

*May 10, 1900.*

ALVEOLAR SARCOMA OF THE CHOROID.

DRS. WM. CAMPBELL POSEY and E. A. SHUMWAY reported a case and presented specimens from a patient aged 70 years. Three months previously the patient had received a blow in the region of the affected eye, since which there has been a history of pain, with gradual failure of eyesight until total loss of vision occurred. The conjunctiva showed bogginess, the anterior chamber was reduced in size, the lens cataractous, the fundus normal. An intraocular growth was suspected and an enucleation was done. The healing was prompt, but death occurred nine weeks later, probably from metastasis to the liver and brain. After enucleation the eyeball was placed in Müller's fluid for many months, and later was frozen in ice and salt, and finally mounted in glycerin-jelly. Another specimen was stained with Weigert's nerve-sheath stain, and with eosin and hematoxylin. On examination the retina was found detached, the subretinal space occupied by an endothelial growth. Changes were also found in the cornea, due to pressure and edema. The epithelial tissues were edematous, the iris pressed against the cornea, certain areas of which appeared atrophic. The anterior capsule of the lens contained pigment cells. The ciliary body was flattened and atrophic. The choroid showed round-celled infiltration and proliferation of endothelial cells of the blood-vessels. The tumor essentially consisted of endothelial cells separated by a connective-tissue stroma into distinct acini with pigment cells with round and irregular nuclei. Some of the cells were three times the normal size. The retina was detached and degenerated. The optic nerve did not seem to be infiltrated by the cellular growth. The growth resembled in some respects a similar specimen formerly presented before the Society by Drs. deSchweinitz and Steele. As the cells showed a proliferation of the endothelial type it could not be properly looked upon as a carcinoma.

DR. SIMON FLEXNER spoke of the areas of degeneration present, which he thought might be ascribed to a colloid or hyaline change. He had seen a similar case in which death also occurred. In this the cells were of a distinct endothelial type and there had been a hyaline or colloid change within the protoplasm of the affected cells.

CARCINOMA OF ILIUM.

DRS. SIMON FLEXNER and A. O. J. KELLY presented a specimen of carcinoma of the ilium. The patient was a man 44 years of age, who had given a history of having had numerous bilious attacks, attended by obstinate constipation. One year previously he had taken cold, and later complained of pain in the left chest anteriorly, in the region of the ninth costal cartilage. This pain was intermittent and was accompanied by tenderness. Three months ago he began to have pain in the region of the epigastrium. On examining the chests the physical signs revealed consolidation at the right apex. The patient had continually lost flesh. Two weeks ago he became obstinately constipated, and this was later attended by visible peristalsis. The diagnosis of intestinal obstruction was made.

Dr. Flexner detailed the pathologic findings as follows: A tumor the size of a hen's egg was found at the lower end of the ilium. The region of bowel affected showed a considerable degree of hypertrophy, but the surrounding parts otherwise appeared to be perfectly healthy. The tumor growth extended to

the ileocecal valve. In the main body of the tumor an area of ulceration was found. The orifice of the cecum admitted a lead pencil. This case is one in which a carcinomatous growth was circumscribed to a small area of the bowel without involvement of the neighboring glands, and would doubtless have been amenable to operative procedures if its real nature had been known in time.

## Cincinnati Academy of Medicine.

### SPLENOMYELOGENOUS LEUKEMIA.

DR. MARK BROWN presented a patient with splenomyelogenous leukemia, shown last fall. (See THE JOURNAL, vol. xxxii, p. 794.) During the last six months the spleen has continued to increase in size until it is now about ten inches beyond the median line of the abdomen and inferiorly well below the iliac crest. He has suffered principally from a severe dragging abdominal pain. The blood shows over 4,000,000 red corpuscles and something over 200,000 white ones; while the differential count does not differ materially from that of last fall. He has been taking arsenic—Fowler's solution—in the interim, and has become very susceptible to its influence, toxic symptoms often becoming manifest after a few doses. He has had no hemorrhage from any of the mucous membranes during the entire course of his disease. Ophthalmoscopic examination was negative, right and left, aside from marked pallor of reflex.

### HEREDITARY SYPHILIS.

DR. MEYER HEIDINGSFELD presented two patients—mother and daughter, the latter aged 13. The mother is afflicted with a typical serpiginous pigmented syphilide affecting the legs, the daughter, presenting teeth, which, taken in connection with the mother's condition, caused him to regard it as unmistakable evidence of hereditary syphilis. He could obtain no history of specific disease from either the woman or her husband.

### RUPTURE OF COAT OF CAROTID.

DR. H. T. GAN presented a patient, male, aged about 60 years, who had met with an accident, involving the region of the neck on the left side. He had developed, as a result, a most pronounced thrill in the region of the carotid artery, with a long buzzing murmur on auscultation. On the right side was a similar condition of affairs but less pronounced. Over the artery ring was a slight systolic murmur. The diagnosis was a rupture of the internal coat of the carotid artery, and also an arteriovenous aneurysm.

### OVARIAN ABSCESS.

DR. C. D. PALMER read an account of an operation on an ovarian abscess on the right side. On examining the left appendage, he found pyosalpinx, but before complete removal could be affected, the woman's condition became such that it was necessary to discontinue the operation. She recovered, however.

### TUBAL PREGNANCY.

DR. R. B. HALL reported a case of ruptured tubal pregnancy on the right side, with pyosalpinx on the left. An operation was performed and the patient recovered.

## New York County Medical Association.

*Special Meeting, May 11, 1900.*

Dr. Parker Syms, First Vice-President, in the Chair.

This session was called to consider a communication from the New York State Medical Association inviting the county association to become a subordinate county organization of the state association, in accordance with the provisions of the newly-acquired charter of that association.

DR. FREDERICK HOLME WIGGIN moved the adoption of the following resolutions:

WHEREAS, The New York State Medical Association has made and constituted the New York County Medical Association a subordinate county association of said state association; and

WHEREAS, The New York State Medical Association has requested that our county medical association ratify such action by resolution: Be it

*Resolved*, That, at a duly called special meeting of the New York County Medical Association, held at the New York Academy of Medicine, No. 17 West Forty-third Street, in the County of New York, New York State, on the 11th day of May, 1900, said New York Medical Association hereby accepts and ratifies the action of the New York State Medical Association, and by virtue hereof agrees to obey the laws, rules and regulations governing such state and subordinate county associations, and to become a subordinate county association of the New York State Medical Association in all respects; and be it further

*Resolved*, That a certified copy of the resolutions be forwarded to the Secretary of the New York State Medical Association.

Dr. Wiggin, in speaking to the motion, said that his efforts to correct the abuse of medical charity had early acquainted him with the general lack of co-operation among the members of the medical profession and the evils arising therefrom. This led him to desire better organization, and in looking for this, he became impressed with the good features of the plan on which the Connecticut Medical Society is organized, and it is along this line that it is proposed to build up the reconstituted New York State Medical Association. The plan of organization has not been definitely settled, but among the features which, in time, it is expected will be introduced is that of affording to the members protection against unjust suits for malpractice. Another advantage of such membership is that the medical directory will be furnished free. Such a directory is useful to country physicians, as well as city practitioners, as it enables the latter to direct their patients to proper medical advisers while sojourning in the country. It should be remmbered that a work of this kind can not be kept free from objectionable advertisements and other undesirable features unless published through the co-operation of the profession.

DR. E. ELIOT HARRIS explained that the proposed re-organization means greater strength and is for the best interests of the general public as well as for the medical profession. A united profession is a necessity when it comes to influencing legislation.

The question at issue was then put to vote, with the result that the Association unanimously adopted the resolution as read.

## New York County Medical Association.

*New York City, May 21, 1900.*

Frederick Holme Wiggin, M.D., president.

### SARCOMA CUTIS.

DR. WILLIAM S. GOTTHEIL presented two cases of this disease. The first was of the typical variety known as multiple pigment sarcomata of Kaposi, and had existed for about six years. It had improved somewhat under injections of arsenic. The second case was also of long duration. Both patients were men.

### SYMPOSIUM ON ORGANOTHERAPY.

### THERAPEUTICS OF SUPRARENAL CAPSULE.

DR. WILLIAM H. BATES opened this symposium with a consideration of this topic. He said that extensive experience has taught him that sterile solutions of this extract are harmless, and that the dose can be varied almost indefinitely without ill effect. Its chief action is as a tonic to the muscular system. In preparing it, one part of the dried extract should be boiled with ten parts of a saturated solution of boric acid, and then filtered and boiled once more in the permanent receptacle. He has obtained most excellent results with this extract in acute conjunctivitis, and even in gonorrheal ophthalmia. Chronic rhinitis is, at least, temporarily benefited by it, and nasal operations can be performed bloodlessly by its aid. He looks on it as almost a specific for hay-fever, and other observers have reported benefit from its use in edema of the glottis and in laryngeal phthisis.

### THERAPEUTICS OF THE PITUITARY BODY.

DR. WILLIAM M. LESZYNSKY read a paper on this subject. He said that tablets containing the equivalent of eight grains of the fresh pituitary gland are on the market, but the results of the treatment of acromegaly by the use of this remedy has been so contradictory as to be valueless. In two cases of this affection, under his own observation, these pituitary tablets

were administered daily for several months, but without any appreciable effect—indeed, there is evidence that the hypophysis grew larger during this period. This alleged remedy has only been used empirically; it has proved inefficacious and there are not, in his opinion, rational grounds for its use.

THERAPEUTICS OF THE THYROID GLAND.

DR. HERMANN M. BIGGS considered this topic. He said that thyroid extract has been chiefly used in the following conditions: 1, exophthalmic goiter; 2, psoriasis, eczema, lupus and certain other diseases of the skin; 3, goiter, 4, certain forms of insanity; 5, obesity; 6, retarded development in children; 7, tetany, and 8, in a number of blood disorders, such as chlorosis, anemia, syphilis and arteriosclerosis. He has employed this extract in two cases of Graves' disease, and in both with aggravation of the symptoms. Our present knowledge does not admit of its use in skin affections except in a purely empirical manner. Its effect on lupus is similar to that of tuberculin. The thyroid extract has been administered with encouraging results in some cases of mental derangement appearing about the time of the menopause, and in some of stuporous insanity. Except in fibroid goiters, the administration of this usually causes a diminution in the size of the goiter. In certain obese individuals the rapid loss of flesh under the use of thyroid extract is quite remarkable. It is desirable to begin with small doses, and to carefully watch the effect. It has also acted well in a few children showing retarded development without cretinism, but the most brilliant results have been, of course, secured in cases of sporadic cretinism. The chemistry of the thyroid gland was still but little understood.

THERAPEUTICS OF THE THYMUS GLAND.

DR. SOLOMON SOLIS-COHEN, of Philadelphia, read a paper on this subject, to be published in THE JOURNAL.

THERAPEUTICS OF THE MAMMARY AND PAROTID GLAND.

DR. JOHN B. SHOBER, of Philadelphia, read a paper with this title. It will appear in THE JOURNAL.

DR. OLIVER T. OSBORNE, of the Yale Medical School, opened the general discussion. He expressed the belief that exophthalmic goiter is the result of hypersecretion of the thyroid gland, as the symptoms are almost identical with those of over thyroid feeding. Much stress has been laid on the size of the gland in this connection, but it is not difficult to conceive of all degrees of secretory activity, irrespective of the size of the gland. It is worthy of note that this gland usually begins to undergo atrophy at the age at which most people normally grow stout, and that women constitute about 80 per cent. of all the cases of Graves' thyroid disease and of myxedema. This preponderance among women might possibly be explained, in part, by the hypersecretion of the thyroid taking place at frequent intervals in the life of the average woman, i. e., at the menstrual periods and during pregnancy. It has been noted that the thyroid treatment of obesity was most successful in persons who became stout between 40 and 50 years of age. From our knowledge of the physiology of the thyroid gland, and of the very small quantity of thyroid secretion distributed to the system daily, it seems proper to criticise the large doses of thyroid extract that have been given. He is disposed to believe that thyroid extract would do the most good in those cases of eczema developing in old age. The thymus gland should prove useful in all cases in which nuclein is indicated. The speaker said that two or three years ago he had propounded the theory that giantism was the result of hypersecretion of the pituitary, and that acromegaly was due to perversion of this pituitary secretion. Extracts from the infundibular portion of the pituitary body are capable of increasing the blood-pressure, while extracts from the hypophysis have an action similar to thyroid. He thinks there is a distinct controlling influence exerted on acromegaly by the administration of extract of the pituitary body. Experiments made in the laboratory at Yale demonstrated thath the blood-pressure is not raised by giving suprarenal extract by the mouth or hypodermically.

DR. FRANCIS J. QUINLAN extolled the virtues of suprarenal extract, which he characterized as a remedy second only to cocain. It is exceedingly useful in acute coryza, and in nasal surgery generally, possessing the very great advantage of being free from bad after-effects, and not giving rise to a drug habit.

## Philadelphia Pathological Society.

*May 25, 1900.*

DR. A. A. ESHNER presented the following specimens: 1. Dilatation of the heart, valvular disease and perisplenitis. 2. Cerebral hemorrhage and ruptured aortic leaflet.

PNEUMONOMYCOSIS.

DRS. L. PEARSON and M. P. RAVENEL presented specimens from a case of pneumonomycosis due to the Aspergillus fumigatus. Of this disease, eighty cases have occurred in man, the lower animals and birds. The first one occurring among birds was reported in 1815; and the first in man in 1842. Virchow later took up this study, with valuable results, and Osler several years ago reported a case to this Society, in which the Aspergillus fumigatus had been found in the sputum of a man. In 1897, Raynaud proved that the disease was a primary one; and it has been found that birds, such as pigeons, doubtless owing to the high temperature of the blood, are easily affected by the disease. Two types of the disease are known, one resembling bronchitis, and the other tuberculosis. The case herewith reported occurred in a cow 6 years of age, and since the animal had always lived on one farm, it was doubtless a primary infection. She had been failing for two months, and it was thought that tuberculosis was present, but no reaction to tuberculin had been obtained. The cough later became troublesome, and death ensued. At the autopsy, nodular growths in the lungs had been found, in some respects resembling hemorrhages. On rubbing a small piece of one of these with glycerin, it was found to contain myriads of the mycelial threads. Pure growth had been obtained on a potato and some of it had been inoculated into a rabbit, causing death within forty-eight hours. This mould grows at a higher temperature than any other form of aspergillus, and since it does not develop toxins or antitoxins, doubtless causes death by acting as a mechanical irritant. The microscopic examination shows cellular infiltration with connective-tissue cells, red blood-corpuscles, and large numbers of myceilial threads extending to the walls of the bronchi, and in many instances, entirely blocking them. Peribronchitis and arteritis are present, and also large areas of emphysema.

DR. SIMON FLEXNER stated that several years ago he had examined a pseudomembrane taken from the nose of a man, and found that the appearance corresponded with the findings described by Drs. Pearson and Ravenel. He believed the condition to be due to the Aspergillus fumigatus.

DR. NAPOLEON BOSTON spoke of the changes in the urine produced by the presence of this mould, in that a formation resembling a pseudomembrane would at times occur, which in some respects resembled the product found on normal urine.

BACILLI OF PLAGUE.

DR. JOSEPH MCFARLAND presented cultures and tissue preparations showing plague bacilli. From certain descriptions given, the bacilli of plague described by Yersin and Kitasato differed and it was probable that the two were dissimilar organisms. The bacillus of plague is not distinctly morphologic. Usually it is a short bacillus resembling a coccus, occurring singly or sometimes arranged in chains of six or seven. They grow well on agar-agar, gelatin, bouillon and ascitic fluid. In the hanging-drop it is found that they do not change form. The reaction of the culture-media, as shown by phenophthalein, does not change and it does not coagulate milk. No growth occurs on potato, and the best temperature for it is that of the human body. The bacillus has been found to live on dried threads for a period of twenty days. The microorganism is fatal to rabbits, producing a peculiar condition of the thymus gland. No effect is produced on cats. The bacillus rapidly becomes attenuated on artificial culture-media regaining its virulence by being passed back through certain animals.

DR. SIMON FLEXNER spoke of the morbid anatomy which he had seen in certain cases of plague in Hongkong. One being acquainted with the disease could recognize it by these changes, especially if of the glandular variety. In these enlarged glands the occurrence of hemorrhage is noted. Even in the pneumonic type they are prone to occur.

PAPILLOMATOUS EPITHELIOMA.

DR. A. O. J. KELLY presented a specimen of papillomatous epithelioma of the pelvis of the kidney obtained from a woman

68 years of age who had suffered with vague symptoms including attacks of hematuria. In a search through the literature on similar conditions it had been found that renal calculi had usually been present.

CIRRHOSIS OF LIVER.

DR. SIMON FLEXNER presented microscopic sections showing the nature of the new tissue in this affection and spoke of its distribution. The work had for the most part been done by students under his direction at the University of Pennsylvania. The findings proved that the new growth corresponded histologically with the tissues occurring in the liver. Sections from cases of hypertrophic and atrophic cirrhosis of liver were shown.

## Philadelphia Pediatric Society.

President, Dr. Alfred Stengel, in the chair.

MENINGOCELE OF OCCIPITAL BONE.

DR. JOSEPH SAILER—by invitation—presented a case of supposed meningocele of the occipital bone. The patient was a girl 3 years of age, who had in December last suffered from a fall down stairs. For some time she appeared to be quite drowsy, and her face became livid, then soon she was as well as ever. A month after the fall strabismus developed; nausea and vomiting occurred, and in a short time the gait became ataxic. There was a slight inco-ordination of movement, but choked disc was not present. Three weeks ago a small round tumor developed in the region of the occipital protuberance, and was smooth and fluctuated. Pulsation was also present; and on pressing down firmly, an irregular orifice was apparent in the occipital bone. On aspirating the tumor its contents was found to be blood; a fact that might lead one to believe that the tumor was some form of aneurysm.

DR. REYNOLDS WILSON stated that one thing which might aid in differentiating this tumor from one of congenital origin is the fact that its site was below the occipital protuberance, while if it were of congenital origin, the site would be slightly above.

DR. J. H. JOPSON had examined the tumor and believed that it communicated with the cranial cavity.

ACUTE ADENITIS.

DR. ALFRED HAND, JR., read a paper and reported several cases of this; and also made some remarks on the terminology and treatment. The first case was one in which a girl, 21 months old, had suffered from enlargement of the cervical glands, and irregular fever—102.8 F. to normal on the same day. There had not been any rash. On the fifth day, cylindroids were found in large number. Two other cases were reported; and in all these, the drug which seemed of greatest value was pure ichthyol, applied twice daily.

DR. J. P. CROZER GRIFFITH reported an epidemic of doubtful nature which had attacked two households. There had been swelling of the cervical glands with fever--in one instance rising to 104 F.—together with nausea and vomiting. In the case of one patient, as there was at the time an epidemic of la grippe, he was under the impression that the cause of the disease was influenza with glandular manifestations.

DR. A. G. ROUSSEL had several years ago investigated the bacteria found in the throat in these cases of glandular fever and found that the principal form was streptococci, rather than staphyloccocci.

DR. S. MCC. HAMILL believes that the real cause of the malady is as yet quite unknown. He relates one case in which a doughy feeling had been present over the affected gland, leading one to believe that it might be diphtheria. Cultures showed both staphylococci and streptococci.

GRAVEL IN A CHILD.

DR. H. D. MARCUS reported a case of gravel in a child 3 years of age, who had been suffering since last year with increased frequency of micturition, scanty urine and gastric disturbances. Its real nature had been determined by means of the sound.

BACILLUS PYOCYANEUS.

DR. W. R. NICHOLSON reported a case of infection by this bacillus. He stated that at one time cases of hemorrhagic diathesis seen in children were supposed to be due to syphilis, but later were believed to be due to septic infection. In some features they resemble septic infection without the splenic enlargement. The mortality is high—over 70 per cent. A case was reported in which a child, on the sixteenth day after birth, developed hemorrhages affecting the mucous membrane of the mouth, and also from the bowel. The umbilical cord had healed normally, but after the hemorrhages began quite a large extravasation of blood developed around the site of the cord attachment. Death occurred. No ulcers could be found in the intestines. The pancreas showed a considerable degree of hyperplasia with thickening of blood-vessel walls. The thymus showed slight degeneration. Cultures from the bile and tissues of the liver showed the bacillus pyocyaneus. The bacillus lactis aerogenes and staphylococcus albus were also found widely distributed.

## New York Academy of Medicine.

*May 17, 1900.*

William H. Thompson, M.D., President.

POISONOUS SNAKES AND SNAKE POISON, WITH DEMONSTRATIONS.

DR. GUSTAV LANGMANN read a paper on this subject. He described the teeth and the poison fangs, and told of the poison glands, which are triangular and the homologues of the parotids. The secretion can be retained at will, if need be for months. Each species has a specific smell for the poison; in many, it is "mousy." Until recently it has been supposed that the effect of the poison was dependent on the virulent bacteria contained in the secretion, but cultures made in different media have given negative results. The first chemical examination of the poison was made with the viperidæ, and the active principle received the name of viperine. Dr. S. Weir Mitchell, in 1883, published the results of his investigations. He found two albuminoids, one dializable and coagulable by heat; the other not. Dr. Langmann thinks it reasonable to suppose that the active principles are albuminoses. Different poisons contain different proportions of peptone and globulin; the former causes some local edema with convulsions, and finally paralysis of the respiratory centers, while the latter, on the contrary, excites local reaction with hemorrhages around the point of injection. Experience has shown that the intensity of the hemorrhages and paralyses correspond to the hydrolysis of the albuminoses. If instant death occurs, it is due to thrombosis. The first effects of the cobra bite are burning pain and edema; then appear vertigo, weakness of the limbs, paraplegia, ptosis, paralysis of the tongue and epiglottis, and inability to speak. The pulse is weak, and the respirations slow and labored. Slight convulsions occur toward the last. The effects of the rattlesnake bite show themselves in hemorrhagic disturbances and bloody effusions from all the mucous membranes, and the constitutional disturbance can be noted within thirteen minutes after the injection. After a temporary increase in the reflexes, tetanus and paresis supervene, with paraplegia. Death usually occurs in twelve hours, but if one survives the paralysis, septic fever may develop. Autopsies on those dying from snake-bites show the serous membranes ecchymotic throughout, especially the peritoneum. The blood is liquid and coagulates very slowly. If death occurs in a few minutes, it is from general thrombosis; if within twenty-four hours, it is from paralysis of the respiratory centers; and if after days or weeks, it is probably from sepsis. Weir Mitchell at one time gave the mortality from the bite of the cobra as 25 per cent., at another, stated that it was not more than 12; while in Australia, it is said to be about 7. The objects of the treatment of snake-bites are: 1. To prevent the absorption of the poison; 2, to destroy or neutralize its effects; 3, to accelerate its elimination; 4, to treat the symptoms. The ligature should be applied promptly and tightly. Sucking the wound with the lips or with glass-cups is of doubtful utility; and if employed, should be preceded by free scarification, as it is doubtful if the poison can be neutralized at the point of its introduction. In view of the fact that the kidneys are implicated, measures directed toward increasing the activity of these organs do not seem to be indicated. Antivenene, he considers the only reliable antidote to the effects of snake-poison; full protection being afforded if 5 to 20 c.c. are injected within 1½ hours after receiving

the bite. He believes that its action is chemical rather than physiologic.

Dr. Langmann demonstrated the method of handling poisonous snakes, handling with impunity a five-foot black diamond rattler and other venomous snakes. The copperhead, he said, was by no means extinct, for three years ago sixty-nine of them had been caught on the Palisades of the Hudson River. To collect the poison, he uses a glass funnel, over which a piece of chamois is tightly stretched. The snake on being brought close to the chamois, immediately buries its fangs in it, and the poison can be seen dripping down into the funnel; to expedite its passage, he presses the poison glands with his fingers.

### Ontario Medical Association.

*Twentieth annual meeting, Toronto, June 6 and 7, 1900.*

Acting vice-president, Dr. Adam H. Wright, was elected to the presidency, that office being vacant through the death of Dr. J. E. Graham.

#### MORPHIA IN PUERPERAL ECLAMPSIA.

DR. DAVID HOIG, Oshawa, contributed a paper on this subject, in which he said that his experience with morphia in this condition had always given him very gratifying results. He recited the history of eight cases, in three of which there was no history of any renal insufficiency. He always made it a practice to examine the urine from time to time, and has frequently noticed albumin present, and no convulsions. He instanced a case where twins were born, no doctor being present, and ten minutes thereafter the woman was dead, without anything, not even convulsions, to account for it.

DR. JOHN FERGUSON, Toronto, in the discussion, stated that it was now generally recognized that puerperal convulsions, even of a severe type, may occur without albumin in the urine; and that the occurrence of albumin may be for the first time known in the history of the patient—in fact, abundance of albumin, without convulsions. There may also be a successful pregnancy in an old albuminuric, in chronic disease of the kidney, without convulsions.

DR. J. L. BRAY, Chatham, speaking of the treatment, did not think that morphia alone was sufficient, as his experience with it had not been successful; free elimination and chloroform having done more for him. As yet the cause of these convulsions is not known. He has observed that when he has a case of convulsions appearing before labor, the prognosis is generally unfavorable; but when they come on after delivery, it has been favorable. He laid great stress on free elimination; for this he gives elaterium or croton-oil. In venesection he has often been unable to get the blood to flow. He instanced one case where the patient had thirty-three convulsions after delivery, with recovery.

DR. K. C. MCILWRAITH, Toronto, emphasized the importance of giving at least 1/2 gr. of morphia, hypodermically, as smaller doses than that are not good.

DR. BARRICK, Toronto, stated that his experience was just opposite to that of Dr. Bray. He had found that the chances were not so good where the convulsions come on after delivery.

DR. HARRISON, Selkirk, said that, in fifty years' practice, he had seen a great many cases of eclampsia, and he concurred in the statement of Dr. Barrick. He has always regarded these cases with convulsions after delivery as dangerous. In properly selected ones he bleeds.

DR. HOIG upheld large doses of morphia. He referred to the debilitated state in which the patient is left after these attacks, and said that the long loss of albumin was responsible for many of the sudden deaths.

#### APPENDICITIS, ITS RECOGNITION AND OPERATIVE INTERFERENCE.

DR. LUKE TESKEY, Toronto, divided this affection into three classes: chronic catarrhal, acute circumscribed and the fulminating or gangrenous appendicitis.

Speaking of the first variety, he said that in many instances the pain is not referred to the appendiceal region at all, but to the epigastric. He laid particular stress on the loss of power in the digestive functions throughout the alimentary tract, associated with marked loss of body weight. These sometimes cause this form of appendicitis to be mistaken for chronic tubercular affection of the abdominal viscera, and sometimes for chronic indigestion. He referred to recent cases of chronic indigestion, when an operation was performed for appendicitis, and this simple catarhal condition was found, without any foreign body in the appendix, but with enlarged lymphatic glands in the vicinity thereof. After operation in these conditions, the recovery was most complete and perfect, so much so that within two or three months they regained their weight and usual power of digestion. Palpating the appendix gives uncertain evidence.

The second class is the form of the affection in which Nature has succeeded in organizing adhesions sufficient to incarcerate the disease to a limited area. This is perhaps the most frequent form. The symptoms were considered, and he said that this class is not difficult to recognize after it has gone on for a short time. When the disease is low down in the pelvis, it is difficult to discover it by palpation. If tumescence can not be found it will be possible to get a degree of resistance, whether low in the pelvis or up toward the liver. This degree of resistance, which is very important, will lead, together with general symptoms, to a diagnosis.

The third class—the acute, fulminating or gangrenous appendicitis—has the greatest degree of intensity of inflammation, produced by the greatest degree of infection, which has created the inflammatory act, so that gangrene is invariably formed. At times it may not be localized in the appendix but in the adjacent structures. Severe symptoms may be expected from the commencement onward. The attack is so intense that Nature makes no attempt to circumscribe. The symptoms are those of septicemia. The amount of tympanites may cause the physician to overlook the exact conditions present. Various sinuses may be formed, imperfectly draining abscesses in the abdominal cavity to various surfaces, perhaps most frequently to the intestinal.

In regard to the operative treatment in the first class, when a diagnosis is made he has no hesitation in pronouncing in favor of operation. He believes that the recoveries should be 100 per cent. In the second class of cases, if he can diagnose the condition within twenty-four hours, by carefully feeling for the resistance, it is the moment for operation. The danger in waiting any longer is that septic material will be absorbed, and trouble begin in other localities.

In the third class, the only hope for life is in an early operation.

*(To be continued.)*

## Association News.

### AMERICAN MEDICAL ASSOCIATION.

*Fifty-first Annual Meeting, held at Atlantic City, N. J., June 5-8, 1900.*

#### Official Minutes of the Sections.

SECTION ON PRACTICE OF MEDICINE.

TUESDAY, JUNE 5—AFTERNOON SESSION.

The regular work of the Section on Practice of Medicine commenced with the address of the Chairman, Dr. George Dock, Ann Arbor, Mich. Papers were read by George M. Gould, Philadelphia; C. N. B. Camac, New York City; M. Howard Fussell, Simon Flexner, J. H. Musser and J. C. Wilson, Philadelphia; and W. Black Stewart, Atlantic City.

WEDNESDAY, JUNE 6—MORNING SESSION.

Papers were read by T. J. Happel, Trenton, Tenn.; and Eugene Wasdin, Surgeon, U. S. M.-H. S. Dr. Happel's paper was entitled "Pseudo (?) or Modified (?) Smallpox," and led to a discussion which manifested some ill-feeling on the part of fellow-practitioners from his own state and Missouri.

#### RESOLUTION CONCERNING SMALLPOX.

The following resolution was moved by Dr. McCormack: That it is the sense of this Section that the cases detailed

by Dr. Happel were mild but genuine smallpox, and that his failure to enforce rigid and systematic isolation and vaccination is to be sincerely regretted, and that to the prevalence of such views, popular and professional, is due the wide and disastrous epidemic now prevailing in this country.

The resolution was declared out of order by the Chairman.

Papers were also to have been read by Robert B. Preble, Chicago; De Lancey Rochester, Buffalo, N. Y.; H. S. Anders, Philadelphia; Julius Ullman, Buffalo, N. Y.; and C. Am Ende, New York City. Owing to the Section adjourning for the General Session, it was decided that these papers should be read subsequently if time permitted.

RESOLUTION ON DEATH OF DR. J. T. WHITTAKER.

During this session, the following resolution, presented by Dr. Osler, of Baltimore, Md., was adopted:

That in the death of Dr. James T. Whittaker, of Cincinnati, the profession of this country has lost one of its most distinguished ornaments, and the Section of Medicine of this ASSOCIATION an earnest and faithful member. That the heartfelt sympathy of the members now in session be extended to Mrs. Whittaker on the occasion of her great bereavement."

The secretary was instructed to forward a copy of this resolution to Mrs. Whittaker.

A resolution was also passed that on the following days the Section should not adjourn for the meeting of the General Session.

WEDNESDAY, JUNE 6—AFTERNOON SESSION.

An interesting symposium on malaria was held. In their absence, the papers of Jesse W. Lazear, U. S. A., Havana, Cuba; and Chas. F. Craig, U. S. A., were read by the secretary. Other papers were read by W. S. Thayer, Baltimore, Md.; E. A. Woldert, Philadelphia; L. O. Howard, U. S. Dept. of Agriculture; Frank A. Jones, Memphis, Tenn.; Wm. Britt Burns, Deckerville, Ark. Dr. Preble also read his paper, which had been left over from the previous session. Officers of the Section for the ensuing year were elected as follows: chairman, Dr. J. M. Anders, Philadelphia; secretary, Dr. Wm. Britt Burns, Deckerville, Ark.

THURSDAY, JUNE 7—MORNING SESSION.

In the "Symposium on Arthritis," papers were read by James J. Walsh, New York City; Daniel Riesman, C. W. Burr, and A. O. J. Kelley, of Philadelphia. A paper by J. C. Wilson, Philadelphia, was read by title. Papers on cardiac affections were read by N. S. Davis, Chicago; S. Solis-Cohen, Philadelphia; Louis Faugéres Bishop and John J. Morrissey, of New York City.

THURSDAY, JUNE 7—AFTERNOON SESSION.

Papers on various phases of "Tuberculosis" were read. The following presented papers: W Freudenthal, New York City; J. M. Anders, Philadelphia; Carroll E. Edson, Denver, Colo.; C. P. Ambler, Asheville, N. C.; A. F. Lemke, Chicago; and Thomas J. Mays, Philadelphia. Papers were read by title for Charles Winslow Dulles, Philadelphia, and C. H. Hughes, St. Louis, Mo.

FRIDAY, JUNE 8—MORNING SESSION.

The discussion on tuberculosis was continued from the previous day by Drs. Ambler, Mays and Lemke.

Papers on "Diabetes Mellitus" were read by James B. Herrick, Chicago; Heinrich Stern, New York City; and Milton B. Hartzell, Philadelphia. Papers were also read by O. T. Osborne, New Haven, Conn.; James M. Peck, Arlington, Ky.; and Julius Ullman, Buffalo, N. Y. The papers of Felix Vitale, Coytesville, N. J., and D. D. Stewart were read by title.

FRIDAY, JUNE 8—AFTERNOON SESSION.

Papers were read by Dr. Bertram W. Sippy, Chicago; A. Marcy, Jr., Riverton, N. J.; D. Benjamin, Camden, N. J.; C. Am Ende, New York City; William Duffield, Phœnix, Ari.; Robert L. Watkins, New York City, and H. S. Anders, Philadelphia. A paper by J. J. Kindred, New York City, was read by title.

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SECTION ON MATERIA MEDICA, PHARMACY AND THERAPEUTICS.

TUESDAY, JUNE 5—3 P. M.

The Section met in the west room of the Casino, Steel Pier. L. L. Solomon, Louisville, Ky., was chairman; J. W. Wainwright, New York City, secretary; seventy-three members and guests were in attendance. Profs Joseph Remington, of Philadelphia; Elas H. Bartley, of New York City, and A. B. Lyons, of Detroit, Mich., delegates from the American Pharmaceutical Association, were introduced.

The Chairman delivered his address, which was referred to the Committe on Papers to report on the recommendations therein contained.

The following committee was subsequently announced: N. S. Davis, Jr., Chicago; H. T. Bishop and H. Stern, of New York City and O. T. Osborne and T. D. Crothers, New Haven, Conn.

The Chair also appointed Dr. J. M. Allen, Liberty, Mo., as a member of the executive committee.

A paper entitled "Treatment of Acute Alcoholism by Large Doses of Digitalis—A Clinical Study Based on Cases in the Alcoholic Wards of Bellevue Hospital," by Henry P. Loomis, New York City, was read by the secretary, and discussed by Dr. O. T. Osborne, New Haven, Conn. "Some Dangers from the Use of Narcotics on Young Persons" was the title of a communication by Dr. T. D. Crothers. This was discussed by Drs. J. M. Allen, Warren B. Hill, F. B. Greene, Frank Woodbury, Jno. T. Smith, W. W. Tompkins, A. B. Lyons, J. N. Upshur, and T. D. Crothers.

The next two communications were: "A Plea for Greater Simplicity in Therapeutics," by L. Faugéres Bishop, of New York City; and "Therapeutic Progress" by J. Tracy Melvin. These were discussed by Drs. N. S. Davis, Jr., Frank Woodbury, T. B. Greenley, O. T. Osborne, C. C. Fite, W. B. Hill, A. B. Lyons, J. N. Upshur, Geo. J. Lochboehler and the chairman. Dr. N. S. Davis, Jr., read a communication entitled "Dietetic Treatment of Diabetes." Dr. Heinrich Stern read a paper on "Coma Diabeticum and Its Treatment." The Milk Régime in the Diabetic State. Discussion on these was, on motion, deferred until the morning session.

On motion it was resolved to have no section banquet.

Dr. C. C. Fite read a paper by title, on "The Proprietary Medicine Question—A Postscript," which was referred to the Committee on Papers.

The Chairman announced the appointment of the following members to serve on the Nominating Committee: Drs. Warren B. Hill, F. G. Wheatley and J. C. Culbertson.

WEDNESDAY, JUNE 6—MORNING SESSION.

The discussion of the papers on diabetes was opened by Dr. Osborne, followed by Drs. Allen, D. R. Brower, Zwisohn, Greenley, Shelly, Lyons, Bartley, Anders, Tompkins and Stern.

A volunteer paper by Dr. C. R. Marshall, Dundee, Scotland, on the "Pharmacology of Nitro-sugars," was read by title by the secretary, and was referred to the publication committee.

A communication was read by Dr. J. M. Anders on the "Treatment of the Gastrointestinal Symptoms of Typhoid Fever," which was discussed by Drs. Favill, Greenley, Reilly, Tompkins, Woodbury and Anders.

Papers entitled "A Brief Note on Ointments and Some of their Medical Applications," Dr. Frank Woodbury, Philadelphia; "Present Views on Use of Unbroken Skin as an Absorbing Medium," Dr. Thomas F. Reilly, New York City; "Idiosyncrasy Against Mercury—A Case of Erythema Mercuriale," Dr. A. Bernheim, of Philadelphia, were read and discussed together. The discussion was opened by Professor Remington, of Philadelphia, and continued by Drs. Reed, Greenley, Lyons, Wheatley, Upshur, Rahter, Woodbury, Reilly, Bernheim, and the Chairman.

A paper on "The Metric System" was read by Dr. F. G. Wheatley, N. Abingdon, Mass., and discussed by Professor Remington and Drs. Barclay, Upshur and Wheatley.

AFTERNOON SESSION.

The first paper was read by Dr. T. B. Greenley, Meadow Lawn, Ky., entitled "Report of a Case, Illustrating Value of Rectal Injections of Salt Solution in Hemorrhage." It was discussed by Drs. Allen, Melvin and Greenley.

A paper on the "Hydriatic Treatment of Chronic Disorders," by Dr. J. H. Kellogg, Battle Creek, Mich., was read by title.

Dr. E. W. Mitchell, Cincinnati, read a paper on the "Preventive Treatment of Migraine," which was discussed by Drs. H. Stern, Yarnall, Benedict, Upshur, Allen, Barclay, and Mitchell.

Dr. S. Solis-Cohen, Philadelphia, presented a communication on the "Rôle of Drugs in the Management of Consumption." It was discussed in connection with the next paper on the "Importance of Early Recognition of Tuberculosis," by A. M. Holmes, Denver, Colo. Discussion was opened, by invitation, by Prof. Wm. Thompson, New York, who was followed by Drs. J. N. Upshur, Cohen and Holmes.

J. N. Upshur, Richmond, Va., read a paper on "Heart Tonics."

Papers by F. C. Shattuck, Boston, on the "Treatment of Peptic Ulcer," and D. D. Stewart, Philadelphia, on "Some Points in the Treatment of Gastric Ulcer," were read by title.

A paper was read, by invitation, by Wm. H. Thompson, entitled "Classification of Medicines, based on the Time Required to Produce Their Effects."

A vote of thanks was tendered to the reader of the paper and discussion postponed until next morning.

The Nominating Committee reported for chairman, N. S. Davis, Jr., Chicago, and for secretary, J. N. Upshur, Richmond, Va.

On motion, the report was unanimously adopted.

### THURSDAY, JUNE 7—MORNING SESSION.

The session opened at 9 o'clock, L. L. Solomon in the chair.

An election was held for officers for the ensuing year. The secretary announced the election of N. S. Davis, Jr., as chairman, and J. N. Upshur, as secretary.

The paper of J. H. Musser, Philadelphia, "On the Use of Strapping with Adhesive Plaster in Various Internal Conditions," was read by title.

J. M. Allen read a communication entitled "Therapeutics of Croupous Pneumonia." It was discussed by Drs. Hill, Marvel, Boice and Mitchell.

J. Leonard Corning, New York, by invitation, read a paper entitled "Therapeutics of Vertigo."

This paper was discussed by Drs. Benedict, Hill and Louis Lautenbach.

On motion, a vote of thanks was tendered Dr. Corning for his paper, with an invitation to affiliate himself in the future with this Section.

Louis J. Lautenbach, Philadelphia, read a paper on "Increasing the Value of Cod-Liver Oil by the Addition of Free Iodin and Free Phosphorus."

Referred by the chairman to Committee on Papers.

The paper on "Action of Chloralose as a Hypnotic" was read by title in the absence of the author, J. M. Tyson, Philadelphia.

### RESOLUTION ON GALENICALS.

Dr. A. L. Benedict, Buffalo, N. Y., on behalf of the Committee on Nomenclature, appointed at the last meeting to confer with the Convention for the Revision of the Pharmacopeia, reported the following:

*Resolved*, That the Section on Materia Medica, Pharmacy and Therapeutics of the AMERICAN MEDICAL ASSOCIATION most respectfully requests the committee on revision of the United States Pharmacopeia to act so far as possible in the interests of standardization of galenicals. In particular, the committee is requested—with such exceptions as may be inevitable—to provide for a solid and a liquid galenical applicable to every vegetable drug, commonly administered internally. Galenicals to be an identical name, but not necessarily prepared with identical excipients, or by identical methods, to be of uniform strength as regards the average crude drug, the liquid being of 50 or 100 per cent, strength and the solids of 100 or 200 per cent., as the committee may deem advisable.

*Resolved*, That a copy of this resolution be sent to each member of the Committee of Revision of the United States Pharmacopeia.

This was, on motion, adopted.

### THURSDAY, JUNE 7—AFTERNOON SESSION.

Dr. O. T. Osborne, New Haven, Conn., was called to the chair, in the absence of Dr. J. W. Wainwright, chairman.

The first paper read was entitled "Irrigation of the Colon, as a Therapeutic Measure," by Geo. J. Lochboehler, Washington, D. C.

The paper was discussed by Drs. Brower, Osborne, Culbertson, Bernheim and Lochboehler.

The paper on "Chills from Obscure Causes," by M. C. O'Brien, New York, was read by title.

Dr. Daniel R. Brower, of Chicago, read a "Protest Against the Use of Proprietary Remedies," which was discussed by Drs. N. S. Davis, Jr., Allen, Bernheim, Lyon, Lochboehler, Tompkins, Woodbury, Lyons and Brower.

"The Therapeutic Application of Organic Extracts" was the title of a communication by O. T. Osborne, New Haven, Conn. "The treatment of Addison's Disease, with Case" was read by John V. Shoemaker, Philadelphia.

The papers were discussed together by Drs. Bernheim, Marvel and Mitchell.

Dr. J. C. Culbertson, Cincinnati, read a paper entitled "Psychic Therapeutics."

It was discussed by Drs. Greenley, Bernheim, Wheatley, Upshur and Culbertson.

"A Symposium on New Remedies, Including Their Chemistry and Therapeutic Application," by J. W. Wainwright, New York, was read by title.

### FRIDAY, JUNE 8—MORNING SESSION.

"The Pharmacologic Assay of Drugs and Its Importance in Therapeutics," by J. M. Houghton, was read by C. T. McClintock, Detroit, Mich.

It was discussed by the Chairman, Prof. Lyons, Drs. D. Woodbury and C. T. McClintock.

A paper on "The United States Pharmacopeia," was read by Jos. P. Remington, Philadelphia.

"The Pharmacopeia, the Medical Journal, and the Profession," by A. L. Benedict, Buffalo, N. Y.; and "What Drug Standardization Means for the Physicians?" by A. R. L. Dohme, Baltimore, Md., were read by title.

The committee on papers, not having presented any report, was, on motion, discharged. Drs. Allen, Dickerson and Reilly were appointed a special committee.

It recommended that paper No. 30 on the program of this Section be returned to the author with the samples and not appear in THE JOURNAL, and that the recommendations contained in the address of the chairman be carried out.

### RESOLUTIONS ON PROPRIETARY PREPARATIONS.

Dr. W. L. Dickinson, St. Louis, Mo., presented the following resolution:

*Resolved*, That the Section on Materia Medica, Pharmacy and Therapeutics desires to express its unqualified disapproval of the use by members of this ASSOCIATION of all proprietary preparations of unethical composition, and entirely approves the course of the Trustees of THE JOURNAL in refusing to such pharmaceutical compounds the privilege of appearing in its advertising pages. This Section expresses the hope that the committee on arrangements of the next meeting will exercise sufficient vigilance over applications for space for exhibition to exclude all such unethical preparations and prevent their obtaining an apparent endorsement from the AMERICAN MEDICAL ASSOCIATION.

This was unanimously adopted.

Dr. J. M. Allen offered a resolution of thanks to the officers of the Section for the admirable program and management of the present meeting, which was seconded by Prof. Remington, and unanimously adopted.

The Section then adjourned *sine die*.

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## SECTION ON NERVOUS AND MENTAL DISEASES.

### TUESDAY, JUNE 5—2 P. M.

Meeting was called to order by the Chairman, Dr. Hugh T. Patrick, at 2 p. m., in the Hotel Brighton Casino.

The Chairman's address was then read. It pertained largely to the practical working of the Section and presented many new ideas for improving its work. Dr. W. J. Herdman, Ann Arbor, Mich., then moved that the Chairman's address be referred to a committee of three for report as to recommendations given in the address. Carried. The Chair appointed Drs. W. J. Herdman, Daniel R. Brower and Jas. H. McBride.

Dr. Herm. H. Hoppe read a paper entitled "Report of Eight Operations for Brain Tumors and Cysts." This was discussed by Drs, Daniel R. Brower, C. H. Hughes, Wm. G. Spiller, Albert Sterne, Hertzol; the discussion was closed by Dr. Hoppe.

Dr. Brower moved that five minutes be made the limit of time for discussions. Seconded by Dr. A. A. Eshner. Carried.

Dr. Wm. G. Spiller read a paper on "A Case Resembling One of Raynaud's Disease, With Microscopic Examination." Discussion followed by Drs. Douglas Graham, Eugene G. Carpenter, D. J. McCarthy, closed by W. G. Spiller.

Dr. David Inglis read a paper on "Dual Action of the Brain." This was discussed by Drs. Luther Carpenter, Samuel Wolfstein, Graham, C. C. Hersman, Hughes, E. Pearce, Robert H. Porter, and closed by Dr. Inglis.

Dr. Richard Dewey read a paper on "Therapeutics of Travel and Change of Scene in Nervous and Mental Diseases," which was followed by a discussion by E. G. Carpenter, H. A. Tomlinson and Jas. H. McBride, and discussion closed by Dr. Dewey. The Chairman then appointed on the nominating committee: Drs. F. X. Dercum, David Inglis and Richard Dewey, to report the following day. Meeting adjourned.

The Section banquet was held at the Hotel Dennis, at 7 p. m., forty members and guests being present. Dr. J. Madison Taylor acted as toast-master. The dinner proved a most enjoyable occasion, and the prearranged speeches were well presented.

### WEDNESDAY, JUNE 6—AFTERNOON SESSION.

The meeting was called to order by the Chairman, at 2 p. m.

#### RESOLUTIONS ON CHAIRMAN'S ADDRESS.

The committee on the Chairman's address reported as follows as to recommendations made:

*Resolved*, That the name of the Section be changed to that of "Nervous and Mental Diseases."

*Resolved*, That consultations of officers of Section be held before adjournment (as provided for also in the new constitution and by-laws of the ASSOCIATION, forthcoming).

*Resolved*, That in the judgment of this Section there should be a chair of Neurology and Psychiatry, with powers and responsibilities equal to those of other chairs in medical colleges in good standing.

*Resolved*, That the address is commended for its eminently practical and suggestive character.

Dr. T. J. Happel read a paper entitled "Morphinism From the Standpoint of the General Practitioner," and Dr. T. D. Crothers one on "Medicolegal Relations of Opium Inebriety," which were discussed together by Drs. J. Keniston and W. S. Watson, the discussion being closed by Drs. Happel and Crothers.

Dr. Eugene G. Carpenter read a paper on "Cranial Injuries and Insanity, with Report of a Case." The discussion was by Drs. Huff, Dewey, G. W. McCaskey and Happel; closed by Dr. Carpenter.

Dr. W. C. Burr read a paper on "Trauma as a Cause of Nervous Diseases." Dr. Arthur Dean Bevan read one on "Traumatic Neuroses From the Standpoint of a Railway Surgeon," Dr. Jas. Hendrie Lloyd one on the "Medicolegal Relations of the Traumatic Neuroses," and Dr. Wharton Sinkler one on "Prognosis and Treatment of Traumatic Neuroses." This symposium was discussed by Drs. F. X. Dercum, Daniel R. Brower, Reginald Sayre, Chas. K. Mills, W. M. Leszynsky, Bishop, A. E. Sterne, David I. Wolfstein, Richard Dewey, W. S. Watson, Nathan Herman, G. W. McCaskey, R. H. Porter, C. C. Hersman and Hugh T. Patrick. The discussion was closed by Drs. Burr and Sinkler.

The Nominating Committee reported as nominees for the ensuing year for Chairman, Dr. H. A. Tomlinson, St. Peter, Minn., and for Secretary, Dr. F. Savary Pearce, Philadelphia. Executive Committee, by right of succession, Drs. C. H. Hughes. Fred Peterson and Hugh T. Patrick. The above officers were unanimously elected.

### THURSDAY, JUNE 7—MORNING SESSION.

A special meeting was decided on "necessary for completion of program."

Several papers received by secretary read by title. Dr. Guy Hinsdale spoke on the desirability of appointing delegates to the Nominating Committee of the ASSOCIATION as "Section Delegates," rather than from the states, as at present done; and the possibility of changing By-Laws of the ASSOCIATION. Dr. G. W. McCaskey discussed some matters in our relations as a Section to the General Session.

Dr. Guy Hinsdale read a paper on "Aphasia with Letter-Blindness, without Word-Blindness; with Right Hemiplegia and Pulmonary Tuberculosis," which was discussed by Drs. F. Savary Pearce, Jas. H. McBride and Wm. G. Spiller, the discussion being closed by Dr. Hinsdale.

Dr. Jas. H. McBride read a paper on "A Study of Cerebral Syphilis, with Report of Cases." The discussion was by Drs. D. R. Brower, H. A. Tomlinson, H. H. Levy, G. W. McCaskey, T. D. Crothers, Wm. G. Spiller and Hugh T. Patrick; closed by Dr. McBride.

Dr. C. C. Hersman presented a paper on "Post-Anesthetic Paralysis" that was discussed by Drs. F. Savary Pearce and Douglas Graham; closed by Dr. Hersman.

Dr. Daniel R. Brower read a communication on "Treatment of Neurasthenia." The discussion was by Drs. Jas. H. McBride, W. S. Watson, Richard Dewey, E. E. Mayer, C. C. Hersman, A. J. Pressey, Douglas Graham, and A. E. Sterne; closed by Dr. Brower.

### THURSDAY, JUNE 7—AFTERNOON SESSION.

Dr. D. J. Wolfstein read a paper by Drs. F. W. Langdon and M. A. Brown and Wolfstein on "Combined Sclerosis of the Lichtheim-Dana Type Accompanying Pernicious Anemia."

The discussion was by Drs. W. G. Spiller and Hugh T. Patrick; closed by Dr. Wolfstein.

Dr. J. D. McCarthy presented a paper on "Migraine, with the Consideration of Heredity," that was discussed by Dr. Hugh T. Patrick.

Dr. A. A. Eshner read a paper on "Differentiation of Chorea and Disorders Simulating It;" Dr. E. E. Mayer one on "Evolutional and Involutional Types of Nervous Disease." These were discussed by Dr. G. W. Drake.

Dr. C. K. Mills opened the symposium on "Hysteria," by a discussion of the "Diagnosis of Hysteria from Organic Disease of the Brain;" and Dr. J. K. Mitchell read a paper on "Rest Treatment for Hysterical Diseases."

In the general discussion, Drs. W. G. Spiller, Douglas Graham, Bridge, Cooper, N. Herman, J. D. McCarthy, A. E. Sterne, G. W. Drake, E. E. Mayer, D. I. Wolfstein and C. H. Hughes spoke, and Drs. Mills and Mitchell closed it.

Motion was made and carried to hold a special meeting, Friday, June 8, at 9 a.m.

### FRIDAY, JUNE 8—MORNING SESSION.

The meeting was called to order at 9:15 a.m.

Dr. F. Savary Pearce read a paper on "Hereditary Sub-Normal Color Perception;" the discussion being by Drs. G. W. Drake and Robert H. Porter; closed by Dr. Pearce.

Dr. G. W. Drake read a paper on "The Simplest Explanation of the Functions of the Nervous System." Discussion was by Drs. Wolfstein and Levy; closed by Dr. Drake.

Dr. A. J. Pressey read a paper on "The Necessity of a More Universal Knowledge of the Treatment of Morphinism, with Report of Cases." This was discussed by Drs. Dunham, H. H. Levy, J. R. Campbell, F. Savary Pearce and J. D. McCarthy; the discussion being closed by Dr. Pressey.

Dr. A. E. Sterne presented a paper on "Effect of Alcohol on the Nervous System." Discussion was by Drs. A. J. Pressey, G. W. Drake and H. H. Levy; closed by Dr. Pressey.

Dr. G. W. McCaskey read a paper on "Combined Gastric and Aural Vertigo, with Report of a Case;" discussed by Drs. D. I. Wolfstein, H. H. Levy and Hugh T. Patrick; closed by Dr. McCaskey.

The chairman brought up the matter of a petition against the abolition of the Pathologic Institute of New York, as presented by a number of leaders in pathologic investigation in that state. This had been signed by many leading neurologists in Boston, New York, Philadelphia, and elsewhere.

On motion, of Dr. Patrick, the chairman and secretary were instructed to sign the above petition for the Section. Carried.

Dr. J. D. McCaskey moved that fifteen minutes be the limit of time for papers. Not seconded.

Dr. E. W. Holmes read a paper on the "Anatomy of Hanging, with Some Recent Observations on Electrocution."

Dr. A. J. Pressey moved that a vote of thanks be accorded by the Section to the chairman and secretary for efficiency of work done for the session and the meeting.

Adjourned.

THE JOURNAL OF THE
AMERICAN MEDICAL ASSOCIATION.

61 MARKET STREET, - CHICAGO.

SATURDAY, JUNE 23, 1900.

## THE SECTION OF PATHOLOGY AND BACTERIOLOGY, AND THE PATHOLOGIC EXHIBIT.

The meeting of the "Provisional Section of Pathology" at Atlantic City convened at the invitation of the President of the ASSOCIATION. A program had been arranged, but no effort had been made to prepare an extended program, and it is quite safe to say that a much longer and more elaborate one could have been easily secured.

Through the efforts of a special committee the collection of specimens and other material on exhibition had been brought together. The ASSOCIATION unanimously voted to recognize the "Provisional Section of Pathology" as an official Section on equal footing with the other Sections. The ASSOCIATION also voted to continue the exhibition of specimens as an official and annual feature, placing the management of the exhibit in the hands of the Section of Pathology and Bacteriology, as this is the one most directly interested in the exhibit.

Thus the ASSOCIATION has assumed the sponsorship for a Section devoted to pathology and for an annual exhibition of pathologic specimens. We trust that in mapping out its field of work—which is quite unlimited—the new Section may heed the advice contained in the address of the Chairman of the Section on Medicine,[1] in which he suggests that special attention should be paid to experimental and general pathology and to the demonstration of specimens, technical methods and apparatus. It is true that much of the work in pathology should be brought out in the various clinical sections. The pathologist must keep close to the clinician. Surely the new Section, if properly conducted, need not hinder the pathologic part of the Section work. On the contrary, it may be expected to encourage such work because an opportunity is now afforded those especially interested in pathology and bacteriology to discuss questions that for the moment especially interest them. Hence the programs for the new Section should be brief and selected with exceeding care; many papers offered this one may be of more immediate good if presented in the appropriate clinical Sections.

There has been criticism of the tendency to multiply the medical Sections. The criticism is hardly applicable in this case, because it concerns a well-directed effort at the extension of the legitimate work and of the sphere of usefulness of an established national body of great strength. And it is to be hoped that, as one of the results of these new departures, the pathologists of the country may come to take more direct interest in the ASSOCIATION and its work.

An important, ever essential part of the work of the Section of Pathology and Bacteriology will be the pathologic exhibit. Numerous suggestions lie near at hand. Anatomic specimens should be selected with reference to their value in pathology; and, as pointed out by Dr. Dock,[2] it might be well to limit the source of specimens each year to the section of country in which the meeting is held. Labor, expense, and risk of damage would then be diminished, and a more general interest in the work created. The practical exhibition of apparatus should be encouraged. Children and minors should be excluded from the exhibit rooms. Special collections of anatomic specimens illustrating particular fields in pathology might be brought together, and in such undertakings the subjects proposed for discussion in the clinical Sections, as for instance, in that on internal medicine, might be taken as guides to the ground to be covered each year. In general, the aim should be to unify and correlate the scientific work at the meetings. For this purpose joint sessions of two or more Sections might be found desirable. At all events the programs of such Sections as the pathologic should be short and select, so as to give the members a chance to participate in the scientific work of others. In this way economy of room might be affected also, as two Sections might use the same room alternately.

[1] Dock: THE JOURNAL, June 9. [2] Ibid.

## ETIOLOGY OF GENERAL PARALYSIS OF THE INSANE.

Whether or not progressive paralysis of the insane and locomotor ataxia represent different localizations of the same disease is a debatable question. They have a number of points in common, and are not rarely associated. Both are more common in males than in females, in the city than in the country and in mature life than at any other period, result from syphilis more than from any other causative condition, and are not amenable to radical treatment. Some aspects of the etiology of progressive paralysis of the insane are discussed in a recent communication by Krafft-Ebing,[1] who characterizes this affection as one of the diseases evolved by nineteenth century civilization. Almost entirely unknown one hundred years ago, the number of cases has increased at a rapid rate nearly everywhere, as shown in part by the fact that the proportion of cases admitted to hospitals for the insane is greater than ever before. Further, the disease occurs at an earlier period of life than formerly, and it is only recently that it has been observed in childhood and youth. The proportion of cases in women is larger than it has been. The increased incidence of progressive paralysis is attributable to the pernicious effect on the mind and the body brought about by the inordinate demands in earlier life of existing social conditions, the abuse of stimulants, especially alcohol, and to a dissipated mode of life.

1. Am. Jour. of Insanity, lvi, 4, p. 645.

Ever since syphilis was first suggested as a cause of progressive paralysis, the appreciation of its importance in this connection has steadily increased. The statistics on this subject must be used with great care. They will necessarily vary considerably, according as they apply to the higher or the lower classes of society, and to urban or country populations. It has, however, been found that a history of syphilis is far more common in cases of progressive paralysis than in cases of insanity without progressive paralysis. The failure to obtain a history of syphilis is not convincing evidence of its absence, and it has been shown, in fact, that such a history can not be obtained in a not smaller proportion of actually syphilitic cases. In a number of instances of progressive paralysis in which no syphilitic history could be elicited, it was found impossible to inoculate syphilis, presumably in consequence of immunity conferred by previous infection. Further evidence of the immunity of cases of general paralysis to syphilis is afforded by the fact that they never come under observation with a primary lesion. An additional point in favor of the syphilitic origin of progressive paralysis is the fact that the relative proportion of cases in men and women coincides with the relative proportion of cases of syphilis in the two sexes in any community. A history of hereditary or rarely acquired syphilis can be elicited, also, in a large number of cases of the infantile and juvenile type of progressive paralysis.

Both syphilis and progressive paralysis are far more common in the city than in the country. Progressive paralysis is common in soldiers and rare in priests and in women of the better classes. In a word, it is rare wherever and whenever syphilis is rare, and vice versa. General paralysis is apparently uncommon in prostitutes, because such women are compelled to abandon their calling before the period at which general paralysis appears, and the disease is then charged to some other occupation. Krafft-Ebing admits that it can not be demonstrated that previous syphilitic infection is absolutely essential to the development of progressive paralysis, although he contends that the probabilities are strongly in favor of this view, particularly in view of the inoculation experiments. How the infection acts in causing the cerebral disease is not yet known, but syphilitic lesions are not found. The evidence shows that syphilis has increased greatly in recent years. This result is attributed to increased celibacy, the enormous expansion of commerce, the increasing volume of travel, the more widespread desire among women for pleasure and finery, and the starvation wages that drive the poorer grls into vice. The increase in the number of soldiers forming the standing armies of Europe and universal conscription are considered as additional and hardly less important factors.

As only a certain number of syphilitics are attacked by progressive paralysis, certain predisposing and accessory causes must be taken into consideration. These are to be looked for in certain biologic phases of life—the critical periods—in which the trophic processes in the organism, as a result of the developmental and functional activity of previously undeveloped organs—at puberty—or their involution—at the climacteric—are subject to great fluctuations, owing to changes in the conditions attending nutrition and circulation. Syphilis probably impairs the vitality of the tissues and diminishes their power of resistance; hence it is justifiable to assume that in this way it can induce a derangement in the evolutional processes, and render involution too rapid. The influence exerted by syphilis may be conceived as giving rise to an alteration in the vital properties of the nerve-elements, as a result of which premature involution is brought about. Progressive paralysis would thus be a manifestation of premature senility. Among the predisposing causes are hereditary taint and a neuropathic constitution, injury to the skull and the brain from rachitis, premature exhaustion of the brain from physical and mental stress, dissipation and other pernicious influences.

Progressive paralysis is not amenable to treatment, and its prophylaxis includes the suppression of prostitution and the prevention of syphilis and of alcoholic excess, and the physical and mental development of the individual.

Krafft-Ebing makes a plea that young men should receive seasonable instruction as to the dangers attending the illegitimate gratification of sexual desire. The senseless sophistry that sexual desire, justifiable of itself, but intensified by the pernicious outgrowths of civilization and nervousness, must be gratified, should be combated.

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## INFLUENCE OF TRAUMA ON THE DEVELOPMENT OF TUMORS.

In order to obtain some idea as to the part played by trauma in the development of tumors, v. Bunger proposed that a collective investigation be instituted to cover the years 1893-1898. In response, Wurz[1] presents a study of the cases of tumor that were treated at v. Brun's clinic during this time. The material includes 584 malignant and 129 benign, in all 713 tumors. The relation of trauma to these tumors was studied critically, such factors as chronic irritation, scars, etc., being excluded. The principal forms of trauma studied consequently are contusions and small solutions of continuity of various kinds. Of the benign tumors, osteomata afforded the most striking examples of the action of trauma, the tumor beginning to develop as soon as eight to fourteen days after the injury. An instance is cited in which adenoma of the breast began immediately after an injury. On the whole, the outcome can not be said to be very striking, inasmuch as of the 129 benign tumors there were 5 cases altogether in which trauma

1. Beiträge f. Klin. Chir., 1900, xxvi, 567.

had a probable influence, 3 possibly such, and 2 doubtful.

In the case of carcinomas, he mentions 8 instances in which the neoplasm seemed to follow small injuries and slight wounds, in which healing failed to take place.

As regards sarcoma, 6 instances probably due to injury are cited; in 4 the tumor followed in four to twelve weeks after the injury and in 1, immediately after. In most of these instances, the sarcoma developed in connection with the extremities.

Otto Hahn[2] describes a carcinoma of the previously healthy scalp, developing in a wound produced by a fall from a wagon. There resulted a wound which extended to the bone; suppuration and non-union followed, and in seven weeks the ulcerated area assumed distinct carcinomatous appearances and microscopic examination established the carcinomatous nature of the process.

Carola Maier[3] discusses the possibility of primary carcinomas in bone on the basis of an interesting instance in which the factor of a trauma also enters. There is described a primary flat-celled carcinoma in the interior of the ulna, developing after a definite trauma but without fracture or wound of the skin. Six months later an operation was made. The patient, 20 years old, has remained well for three years and there is as yet no evidence of any primary tumor elsewhere. Now, Cohnheim assumed that an embryonal matrix must exist; trauma favoring growth by producing congestion, while Ribbert and others believe that misplacement may occur in after life with or without preceding inflammatory proliferation of connective tissue. How did the epithelium in Maier's case get into the medullary spaces without fracture? Was there a fissure? Or an embryonal, misplaced matrix? At all events the rôle of trauma in the development of carcinoma and other tumors, though somewhat limited, can not be denied. Such cases as Hahn's, and also Maier's, are of great interest because of their practical importance with respect to questions of accident insurance.

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## DISSEMINATION OF BACTERIA FROM THE MOUTH DURING SPEAKING, COUGHING, AND OTHERWISE.

The investigations of Flügge and his pupils and of others have shown that in speaking and coughing, droplets of mucus and saliva are expelled from the mouth and carried for some distance away from their source of origin. Such droplets have been found to carry bacteria with them. It is especially in connection with the dissemination of tubercle bacilli that this demonstration becomes of significance. Recently Koeniger[1] has published the results of extensive studies of bacterial dissemination by droplets from the mouth, using the bacillus prodigiosus in his tests because of its ready recognizability from the red pigmentation of its colonies. Persons would rinse their mouths and throats with suspensions of this bacillus and then, stepping into a specially arranged room, speak in more or less loud tones for varying periods, the disseminated bacilli falling on plates of culture-media disposed here and there throughout the room. In this way coughing, whistling and sneezing were studied as well as the special effect of repeating the various letters of the alphabet. Consonants—some more than others—were found to throw out bacteria in greater numbers than vowels. Koeniger establishes the fact that this mode of bacterial dissemination takes place over a much wider range of distance than claimed heretofore, the minute droplets or bubbles sailing far and wide through the atmosphere and alighting on all sides of the experimenters. The greatest distance to which bacteria were carried in these experiments was 12.40 meters.

The question now is: of what importance is droplet dissemination in the spread of infectious diseases? It would seem, as Koeniger states, that this depends largely on the number of pathogenic bacteria in the mouth. There can be no doubt that persons with pathogenic bacteria in their oropharyngeal cavities may become dangerous to their surroundings. We know that pneumococci and tubercle bacilli frequently occur in the secretions of the mouth; and diphtheria bacilli have been found in all parts of the mouth, not only during the active stages of the disease, but long after convalescence has set in (Neisser). Shaffer and others have demonstrated that lepers with lesions of the oral and nasal mucous membranes give off lepra bacilli in enormous numbers. Influenza, the pneumonic form of bubonic pest, whooping-cough, staphylococcus and streptococcus anginas, and infections of the respiratory tract in general are other examples in which dissemination of germs may take place. When the fluids of the mouth are densely populated with bacteria, a coughing spell, "yes even a few sharp words" would suffice to so contaminate the atmosphere of a medium-sized room that other persons would have a good chance to become infected.

As the possibility of this mode of spreading infectious diseases is so evident there are certain prophylactic measures that merit enforcement. The handkerchief should be held in front of the mouth when coughing, and this should be generally encouraged for use by the well as much as the sick. In case of tuberculosis and of plague a gauze mask for the mouth and nose has been recommended for the patient and also for the attendants. Disinfectant mouth-washes should be used, perhaps not always so much in the interests of the patient as for the welfare of those about him. Then steps should be taken to protect articles in the rooms exposed to infection by this method, which undoubtedly plays some rôle in wound infections. Sneezing disseminates microbes in the well as much as in many sick, and here the conscientious use of the handkerchief is specially

2. Ibid., 591.
3. Ibid., 553.
1. Ztft. f. Hyg. u. Infektionskr., 1900, xxxiv, 119.

dicated. Nurses and hospital attendants, by following e indications pointed out, may do much to protect emselves and others. As mentioned by Koeniger, the aying of a stream of water on an infected surface of e skin, for instance, is hardly a safe procedure in view f the foregoing statements.

## BLAND AND THE "METROPOLITAN MEDICAL COLLEGE."

A Chicago paper, in reporting the trouble that the lleged "Metropolitan Medical College" is just now hav- g with the United States government,[1] mentioned one . A. Bland as a member of the faculty. This called rth a reply from the individual, who states that he as never been a member of said faculty. As one T. A. Bland has been an active mover against any restrictive egislation in regard to quackery—lobbying in this and ther sections against medical practice acts, etc.—the rror was a natural one, since such work is directly in avor of establishments like the one that has just come o grief. The question arises, however, whether this enial is as complete as it is intended to appear, and hether the same person could or would deny any sim- lar conection with the earlier discredited "Inde- endent Medical College," which is represented at the resent by its successor and equivalent—the "Metro- olitan Medical College." If we are not mistaken, it ormerly sent out circulars including one T. A. Bland n its faculty. Unless this connection can also be ruthfully repudiated, the present denial looks like a mere quibble, and the said person should share the dis- grace as well as the "honor" of connection with the con- ern now before the courts. In view of future possible obby work and the interests of the so-called American Medical Union,[2] organized, as it appears, to fight legal restrictions of unqualified medical practice, this may be a matter of some importance.

## THE COCAIN HABIT.

The negroes in some parts of the South are reported as being addicted to a new form of vice—that of "cocain sniffing" or the "coke habit," as it appears to have this name also. A negro, it is said, will buy 5 cents' worth of cocain, which is sold in a little paper box for such purposes, and, taking it in the old-fashioned way of snuff-takers, proceed to indulge in a "coke drunk." The effects are described as much like those of an ordinary whisky drunk; some cocain "sniffers" are quarrelsome, some hilarious, some morose, and many are happy and indifferent like the opium smokers, while the intoxication lasts. It appears even that the habit is going to succeed to the recognized legal rights of whisky, as we read that one community licenses the sale, allowing, however, druggists to sell the alkaloid on physicians' prescriptions, but imposing heavy penalties on the doctor who prescribes it for other than patients requiring it medicinally. In this there is progress in a line not altogether encouraging. It is a pity that anything further in the way of intoxications should receive legal recognition. The world has heretofore got along without cocain exhilaration, and the necessity of it for the negroes of Kentucky, even could it be confined to them, can not be reasonably urged. The precedent is bad, and it is to be hoped the custom will not be followed elsewhere.

1. THE JOURNAL, June 9, p. 1497. 2. THE JOURNAL.

## DESQUAMATION IN THE COURSE OF TYPHOID FEVER.

Desquamation has been rarely observed in the course of typhoid fever, and then principally in children. It occurs either at the close of the febrile period, or a little later—ten days or two weeks after defervescence. In view of the rarity of its occurrence the report of six cases in adults reported by Remlinger[1] among 706 cases, is of especial interest. Perhaps if carefully looked for, the condition would be found more frequently than the references to the subject would indicate. All of the six cases were grave; the fever was prolonged beyond the usual limits, and convalescence was long and difficult. The desquamation appeared as the temperature commenced to fall. The scales were neither furfuraceous nor membraniform, but lamellated, and in character were intermediate between those of measles and those of scarlet fever. The process appeared earliest, and was most marked, on the lateral aspect of the chest and the abdomen, and, in general, was limited to the trunk, although in one case it extended to the extremities. In three instances it was associated with falling out of the hair. The period of occurrence, and the thinness of the lamella would seem to be in accord with the view that the desquamation is the result of a sudoral eruption, but this was not observed in degree sufficient to cause desquamation, which is itself rare, while in three other cases with sudamina, desquamation was not noted. The phenonomenon is considered atrophic and analogous with the falling out of the hair that at times takes place. It appears to be of favorable prognostic significance, indicating the advent of convalescence.

1. Revue de Médecine, 1900, No. 5, p. 365.

## THE BENEFICENT SPIDER.

Since the mosquito has been found out and we know that, while masquerading as a mere nuisance, she is a deadly enemy, it is well to take stock of our insect friends that are, in a measure, our protectors from her attacks. It is well known that the dragon-fly is an enemy to mosquitoes, but we have been apt to overlook another less attractive ally. Dr. O'Connell of the British Army calls attention to the usefulness of the despised or hated spider as a protector of mankind against the disease-bearing mosquito. The general opinion held by us of these fellow creatures of ours has been a distinctively unfavorable one. The late Grant Allen, who as a popularizer of natural history, can probably be accepted as a fair exponent of the prevalent views, while claiming for them a very high place among animals with jointed bodies, is quoted as describing them as "ferocious, cruel, blood-thirsty, shining examples of abandoned and shameless wickedness." It is the spider, however, who builds for us, unasked and unthanked, a web against the malarious mosquito. If

only let alone, it would bar every passage. Its intellectual endowments—perhaps the highest among articulates—are such that it knows how to seize each point of advantage in its beneficent work. Morally, the spider is no worse than those human parasites, the dog and the "harmless necessary cat," but its appearance and manners are less attractive and for this reason therefore, it loses all the credit of, and advantage from, the good it does ungrateful mankind. It was a spider that saved a Bruce, but this one good deed is all that is recorded in history to its credit. The innumerable lives it may have saved from malignant mosquitoes and infection-bearing flies should be reckoned in its account.

## ACUTE ANTERIOR POLIOMYELITIS IN AN ADULT DUE TO INFECTION.

There is accumulating evidence in favor of the view that acute anterior poliomyelitis is an infectious disease, though the actual demonstration of a causative microorganism has not yet been made. Apart from the sudden onset of the disorder, sometimes with convulsions, often with diarrhea, and its febrile course, the occasional epidemic distribution of the cases especially is indicative of a bacterial agency in the etiology. The disease is most common in children, occurs but rarely in adults and generally gives rise to flaccid, atrophic paralysis in one extremity, sometimes in both lower or both upper, and least commonly, in both the upper and the lower on the same side. A case where the disease occurred in an adult in hemiplegic distribution and was probably of infectious origin has recently been reported by Gumpertz.[1] The patient was a robust merchant, 23 years old, who, during an attack of what possibly was typhoid fever, but which may have been merely the febrile state associated with acute anterior poliomyelitis, was seized with flaccid paralysis, wasting, diminution in electric irritability and in the reflexes, but without sensory alteration, in the upper and the lower extremity upon one side of the body. It was suggested that the presence of a furuncle upon the left buttock near the vertebral column may have been responsible for the development and the localization of the spinal disorder, through embolism or metastasis.

## INFECTIOUS DISEASES AND EPILEPSY.

The relationship existing between infectious diseases and those of the nervous system is a very interesting problem, and has long been an object of close scrutiny. Although it is well known that infectious diseases have figured largely in the production of many nervous affections, such as the cerebral and spinal palsies of children, it is not so well understood that the influence of infectious processes on a previous existing mental or nervous disease has also been carefully considered by able investigators. Moreover, the subject is as old as medicine. In a painstaking review of the subject, Toulouse and Marchand[2] state that Hippocrates knew that intermittent fever could suspend epileptic attacks for a time, and many analogous facts have been known from the time of Portal. Seglas and Pelliasier recently wrote a thesis on the subject. Féré, the noted French epileptologist, has shown that even a boil or abscess, while in active formation, is able to modify the course of epilepsy. Some of our major affections which have suspended the epileptic paroxysms are erysipelas, typhoid fever, and pneumonia. Seglas and Pelliasier recorded seven cases of pneumonia, in six of which the epileptic attacks were suppressed entirely during the course of the pneumonia. The mechanism of the suspension of convulsive disorders during fever is still unsettled, some of the current theories are nevertheless very interesting; for instance Bourneville thinks that the fever offers a vicarious means of expenditure of energy, which under ordinary conditions is manifest in the epilepsy by means of the convulsions. Still others hold that the fever generates toxic substances in the blood, which induce the nervous system to inhibit expenditure of energy. In proof of the correctness of the latter theory it may be said that after the fever is passed the paroxysms are more frequent, thus apparently compensating for the temporary cessation of seizures during the fever. While in the sleep state, which is in many ways opposed to fever, the epileptic attacks are much more frequent, thus adding further evidence to the inhibition theory for the suspension of epileptic paroxysms in fevers. Toulouse and Marchand report one case in which diurnal attacks were changed to attacks every twelve days by the intervention of erysipelas, while Pelliasier has collected no less than eighteen cases of similar remarkable improvement after occurrence of typhoid in epileptics. While there seems to be a diminution of epileptic attacks during the course of a complication of infectious diseases, the permanency of the benefit does not seem to be sufficiently lasting to warrant the establishment of an infectious disease as a new curative measure for epilepsy.

## THE SAN FRANCISCO PLAGUE SITUATION.

Dr. Kinyoun, of the Marine-Hospital Service, in the latest report of that bureau, notices the peculiar attitude of a portion of the San Francisco press, especially the misrepresentation in regard to himself as an authority for the statement that plague infection did not exist in that city. He says that, whatever may be the case at present, plague infection existed in the Chinese quarter on May 27, and would continue until a strong, determined and concerted effort was made to eradicate it. The policy in the course taken by some of the San Francisco papers is hard to understand; it certainly has not succeeded in convincing the public elsewhere that cases of the plague have not occurred there, but it has created a grave suspicion, that in its way is even worse than would be a candid admission of the fact. In the latter case, we would feel better assured that the efforts to restrict and exterminate the disease would succeed, and the country generally would feel easier. As it is, we have the evidence of the officials entrusted with the duty of watching our coasts—the marine-hospital surgeons—as well as of the local health authorities, that plague has existed there, if it does not now exist and no newspaper authority or even judicial decision will be accepted as outweighing this testimony. We

[1] Berliner Klin. Woch., 1900, No. 16, p. 349.
[2] Revue de Psychiatrie, 1899, p. 133.

know, moreover, that the plague often occurs sporadically before becoming epidemic—a fact that does not increase satisfaction with the present conditions of affairs. It would be most unfortunate if, through misguided public sentiment or legal interference with quarantine, the pest should gain a foothold on the Pacific coast.

# Medical News

## ILLINOIS.

### Chicago.

AT THE commencement exercises of the Northwestern University, held June 14, the degree in medicine was conferred on eighty-three men and twenty-one women from the Woman's Medical School. Dr. Cyrus Northrup, president of the University of Minnesota, delivered the commencement address.

ANNUAL MEETING AND ELECTION.

The Chicago Medical Society held its forty-eighth annual meeting on June 20. Dr. Maurice H. Richardson, Professor of Surgery, Harvard Medical School, Boston, delivered the address upon the subject of "Surgery of the Gall-Bladder." After the president's address, on "Physiology and Pathology of Pregnancy and Hints on the Management of Labor," and the reports of the officers and committees, the annual election took place, with the following result: president, James H. Stowell; first vice-president, Alexander H. Ferguson; second vice-president, Adolph Gehrmann; secretary S. C. Plummer, Jr.; treasurer, Robert H. Harvey; trustees, Wm. H. Wilder, for the Ophthalmological Society; John Ridlon, for the Orthopedic Society, and E. J. Doering, for the Medicolegal Society.

WOMAN'S MEDICAL COLLEGE ALUMNAE.

The Alumnæ Asociation of the Northwestern University Woman's Medical School elected the following officers, at a meeting held June 15: president, Marian Kelley Bowles, Joliet; first vice-president, Hezekiah Crabtree, Chicago; second vice-president, Anna White Sage, Chicago; secretary, Eliza H. Root, Chicago; treasurer, Mary C. Hollister, Chicago; executive committee, Marie J. Mergler, Elizabeth Dunn, and Ida Schell, Chicago.

DINNER FOR DR. KEEN.

A Rush Faculty dinner was given at the Chicago Club on the evening of June 20, in honor of Dr. W. W. Keen, of Philadelphia, who delivered the commencement address before the faculty and students of Rush Medical College at the annual commencement, June 21. There were present Dr. Maurice H. Richardson, of Harvard, and the following from Chicago: Drs. Frank Billings, J. B. Herrick, J. Clarence Webster, N. Senn, Christian Fenger, John E. Owens, M. L. Harris, Arthur Dean Bevan, Daniel R. Brower, F. S. Coolidge, Harold N. Moyer, E. Fletcher Ingals, James Nevins Hyde, A. J. Ochsner, L. Hektoen, George H. Simmons, and President Harper, of the University of Chicago.

RUSH MEDICAL COLLEGE COMMENCEMENT.

The commencement of Rush Medical College took place on June 21, the exercises being held in Studebaker Hall. The Doctorate Address on "The Ideal Physician," was delivered by Dr. W. W. Keen, of Philadelphia, and is printed in this issue. A class of 210 was graduated, about 25 per cent. of whom had already received degrees from literary colleges. Dr. Frank Billings, Dean of the Faculty, conferred the degrees. The honor men were the following: Fellowship in pathology, Theodore Tieken, M.D.; fellowship in chemistry, Charles S. Wood, M.D.; fellowship in materia medica and pharmacology, Charles M. Schultz, M.D.; fellowship in medicine, Alexander P. Stevenson, M.D.; fellowship in surgery, Harry W. Horn, M.D. The E. L. Holmes prize and scholarship at Wood's Hall, Mass., was awarded to Martin H. Fischer, M.D.; the Benjamin Rush medal to Oscar H. Dahms, M.D.; the J. W. Freer medal to Frank M. Wood, Jr., of the class of 1901; the L. C. P. Freer medal to Frederick Greenbaum, of the class of 1902; the Daniel Brainard medal to Don H. Palmer, of the class of 1903, Frank M. Wood, Jr., receiving honorable mention; and the DeLaskie Miller prize to George W. McClure, M.D. The Alumni banquet was held on the same evening at the Auditorium Hotel.

## NEW YORK.

DR. E. E. WEBSTER, who has been practicing in Hornellsville for several years, has returned to Woodhull and resumed practice.

DR EDWARD F. BRUSH, Mt. Vernon, gave a dinner at his home, June 14, to the directors of the Society of Medical Jurisprudence of New York, of which he was formerly president.

A LARGE bronze memorial tablet of Dr. Cornelius N. Hoagland has been placed in the Hoagland laboratory, by the physicians of the Long Island College Hospital.

DR. LEWIS W. ROSE, chief of the department of health and sanitarian at the state industrial school, Rochester, for six years past, has resigned on account of a rule just made, that the chief of that department shall reside in the institution and give up his whole time to the service.

NEW YORK COUNTY MEDICAL ASSOCIATION.

At the annual meting of this Society, held June 18, the following officers were elected: president, Parker Syms; first vice-president, J Riddle Goffe; second vice-president, Emil Mayer; recording secretary, Ogden C. Ludlow; corresponding secretary, J. W. Draper Maury; treasurer, Charles E. Denison, and member of the executive committee for three years, Frederick Holme Wiggin.

## NEW JERSEY.

THE MEDICAL Board of the Atlantic City Hospital has appointed Dr. Sylvester J. Goodman, of Philadelphia, resident physician for the ensuing year.

THE THIRD annual dinner of the Practitioners' Club, of Jersey City, was held June 12. Dr. J. A. Exton was chosen president, and Dr. W. Steadman, secretary and treasurer. The executive committe will remain as before: Drs. T. R. Chambers, G. K. Dickinson and F. D. Gray.

## PENNSYLVANIA.

AT THE commencement exercises of Dickinson College, Carlisle, the degree of LL.D. was conferred on Dr. L. S. Pilcher, of New York City, editor of the *Annals of Surgery*.

A SEVERE epidemic of measles is spreading over Montgomery county and the majority of children in the primary grades are being kept from school on account of sickness.

### Philadelphia.

DR. JOHN MADISON TAYLOR will spend the summer in Bar Harbor, Me.

DR. J. H. BRINTON tendered the class of '50, University of Pennsylvania, a banquet on the evening of June 13, at his residence, 1423 Spruce Street.

AT THE banquet of the class of 1890, held at the University Club, June 13, the following officers were elected: President, Dr. J. H. Wallace Rhein; secretary, Dr. H. S. Anders; treasurer, Dr. W. R. B. Harland.

DURING the past week another offender of the oleomargarin law was sentenced to the penitentiary for two months and fined $200 and costs. It is said that the State Dairy and Food Commission have a list of about one hundred persons, who will shortly be arrested for the same offense.

MORTALITY STATISTICS.

The number of deaths occurring in this city for the week ended June 16, was 455, an increase of 44 over the previous week, and an increase of 32 over the corresponding period of last year. The principal causes of death were: apoplexy, 17; cancer, 20; tuberculosis, 53; heart disease, 31; pneumonia, 33.

UNIVERSITY BANQUET.

The thirtieth annual banquet of the graduates of the University of Pennsylvania was held on the evening of June 12, and the following officers were elected: president, Dr. John Ashhurst, Jr.; vice-presidents, Drs. Horace Y. Evans, James Tyson, Charles K. Mills and Samuel D. Risley; secretary and treasurer, Dr. William S. Wadsworth. Dr. Samuel D. Risley was toast-master for the evening, and the principal addresses were made by Dr. E. W. Holmes and Col. A. A. Woodhull.

SANITARY SUGGESTIONS TO MOTHERS.

Some time ago the Philadelphia Obstetrical Society recommended to mothers certain rules, governing the care and management of infants during the summer months, such as proper food, time for bathing, methods of dressing, danger in certain drugs, etc. These have been found so useful that the chief of the Bureau of Health has ordered them published for distribution.

CHANGES IN PHILADELPHIA HOSPITAL.

For some time certain changes have been imminent at this institution. As has been mentioned in a previous issue of THE JOURNAL, Superintendent Lawrence resigned and his successor, William M. Geary, has been appointed. Dr. John V. Shoemaker has been added to the medical board, and certain other vacancies have been filled. Drs. Joseph Sailer and B. Franklin Stahl have been appointed medical registrars, and Dr. W. C. Pickett, neurologic registrar. Drs. Horace E. James and Edwin H. Miller have been appointed district physicians to the third and eighteenth wards, respectively.

ANTIVACCINATION SOCIETY.

The *Philadelphia Press*, of June 12, prints the following from a public speech made by Lawyer C. Oscar Beasley, the Pennsylvania representative of the Antivaccination Society: "I wish to say to this Court that I have proof in my possession, which I intend to present to the criminal branch of the administration of justice, that the very calves which are inoculated in some of the vaccin farms, after being kept for eight days, are carted away in the night and sold in the Philadelphia markets as fresh meat." It is said that two men have for some time been making investigations of certain farms, and that suits are to be entered at an early day. It is also stated that as soon as a vaccinated child dies, the Antivaccination Society will enter suit against the attending physician, and an attack in open court will then be made on the vaccin farms. In this connection it might be interesting to note that a trial has just been concluded in which the efficacy of vaccination has been reviewed by Mr. Beasley, who in his address to the court quoted Dr. W. M. Welch as one of his authorities who denied its efficacy. This was no sooner published than Dr. Welch immediately had printed an open letter in which he denied such a charge, and said further that statistics he had published from time to time "form a long chain of evidence in support of the protective power of vaccination against smallpox, that is simply incontrovertible, and no one knows this better than Mr. Beasley himself."

## MARYLAND.

DR. CHARLES A. WELLS, Hyattsville, has been unanimously indorsed by the Prince George County Convention as its candidate to represent the Fifth district in Congress. Dr. Wells, if nominated, will be a strong candidate, as he has practiced medicine in the district nearly forty years, and has many warm advocates in both political parties.

DR. LOUISE D. HOLMES, of the Woman's Medical College, Baltimore, has been elected assistant physician to the Springfield Asylum for the Insane at Sykesville. She will have charge of the large building for the female insane, to be opened July 1.

### Baltimore.

IN THE Baltimore Medical College, Dr. J. M. Rowland has been appointed professor of obstetrics, vice Dr. Wilmer Brinton, resigned; and Dr. J. W. Lord, associate professor of anatomy, vice Dr. J. M. Rowland.

AS THE result of the examinations held in May, the State Board of Medical Examiners has granted licenses to seventy-five candidates to practice medicine in this state.

ARNOLD ELZEY Camp, United Confederate Veterans, elected Dr. George H. Eyster, surgeon, and Dr. W. R. McKuen, assistant surgeon.

MEDICAL DEPARTMENT OF JOHNS HOPKINS UNIVERSITY.

At the twenty-fourth commencement, held June 13, forty-three received diplomas, among whom were thirteen women. The graduates were presented by Dr. William H. Howell, professor of physiology; the degrees were conferred by Prof. Basil L. Gildersleeve, and Dr. Osler delivered the address. The following appointments have been made: Thomas S. Cullen and Wm. W. Russell, associate professors of gynecology; George P. Dryer, Ph.D., associate professor of physiology; Reid Hunt, Ph.D., associate professor of pharmacology; Norman McL. Harris, associate in bacteriology; Wm. G. MacCallum, associate in pathology; Percy M. Dawson, instructor in physiology; Charles P. Emerson, instructor in medicine; Eugene L. Opie, instructor in pathology; Merwin T. Sudler, Ph.D., instructor in anatomy; Wm. S. Baer, assistant in orthopedic surgery; Warren H. Lewis, assistant in anatomy; Frank W. Lynch, assistant in obstetrics; John B. McCallum, assistant in anatomy; Harry T. Marshall, assistant in pathology.

## OHIO.

### Columbus.

DR. J. A. BURGOYNE has been reappointed physician for the Institution for the Deaf.

DR. F. F. LAWRENCE had the degree of doctor of science conferred on him by Baldwin University at the commencement exercises held recently.

### Cincinnati.

THE BOARD of Trustees has added the following to the faculty of the medical department of the University of Cincinnati: William Muehlberg, demonstrator of physiology; Brooks Beebe, professor of nervous and mental disease; D. I. Wolfstein, professor of pathology.

THE TRUSTEES of the Laura Memorial College have elected officers as follows: Alexander McDonald, president; Rev. H. M. Curtis, vice president; Richard Folsom, treasurer, and Rev. J. L. Taylor, secretary. Professor Norton resigned, and Drs. R. G. Boone and C. D. Todd were elected to fill vacancies. Dr. Elizabeth Campbell was elected to the chair of theory and practice, and Dr. William Muehlberg, professor of physiology.

## MICHIGAN.

DR. R. S. LINN, Detroit, has been appointed an acting assistant-surgeon, U. S. A., with the rank of first lieutenant, and will go to the Philippines.

THE MEDICAL library of the University of Michigan, through Dr. George Dock, has recently come into possession of a rare and valuable book—Laennec's work on Auscultation and Diseases of the Lungs and Heart.

## CALIFORNIA.

A HOSPITAL building for sick children is being erected at San Anselmo, on the grounds of the California Presbyterian Orphanage. The funds are furnished by the King's Daughters of the First Presbyterian Church of Oakland.

PLAGUE PRECAUTIONS.

To protect Southern California against the bubonic plague, Dr S. J. Quint has been appointed by the United States Marine-Hospital Service and stationed at Kern City to inspect all trains coming south. As a further precaution, in Los Angeles, the health officer is keeping a close watch over Chinatown, and has been empowered to take such action as he deems best to place it in a proper sanitary condition.

### Los Angeles.

A class of eighteen was graduated at the commencement exercises of the medical department of the University of Southern California, held June 12. Dr. W. LeMoyne Wills delivered the address in behalf of the faculty, taking as his subject, "A Better Preliminary Education for Medical Students."

MORTALITY STATISTICS.

The number of deaths for May were 146, equal to a rate of 17 per 1000. Contagious diseases reported during the month were: diphtheria, 8; scarlet fever, 16; typhoid fever, 11; measles, 434. There were 30 deaths from pulmonary consumption. On account of the time consumed in recording cases of a disease not usually serious, the Board of Health revoked the rule requiring the reporting of measles, and established a new order directing physicians to report all cases of tuberculosis.

## MINNESOTA.

THE GRADUATING exercises of the medical department of

Hamline University, Minneapolis, were held June 6. Eighteen received diplomas.

## INDIANA.

DR. S. R. CUNNINGHAM, Indianapolis, has been appointed assistant surgeon of the Northern Indiana Hospital for the Insane, at Logansport.

## KANSAS.

A FORTY-ACRE tract of land between Pittsburg and Frontenac has been given to the coal miners of southeastern Kansas for hospital purposes by C. J. Devlin. A model building is to be erected, at a cost of about $12,000, most of the money being supplied by Mr. Devlin. The hospital will be in charge of the Sisters of St. Joseph, of Wichita.

### ABOLITION OF STATE BOARD OF HEALTH.

DR. W. B. SWAN, secretary of the State Board of Health, believes that the legislature would make a mistake if it abolished the Board and created, in its stead, the office of Health Commissioner. He said: "It has been done in several states, and always with unsatisfactory results. I believe it is best to leave it as it is. The members of the Kansas Board do not draw salaries, and their *per diem* and mileage once in three months amount to comparatively nothing. They come from the different parts of the state with a full knowledge of the health situation, and in a few hours' conference are prepared to act intelligently on the questions that may arise. Taking into consideration the importance of the Board of Health, I am sure that it is the most inexpensive department of the state government."

The conversation in which Dr. Swan thus expressed himself was brought about by a reference to a recent interview in which Governor Stanley stated that, if re-elected, he would recommend that the Board of Health be abolished and that the office of Health Commissioner be created in its stead. The governor's idea was that the Board was a useless body because it was not on the spot; that the secretary or commissioner, being present, always knew what was going on, and in cases of emergency could act promptly. The governor said that he had not been shown that the health board had ever been of any service to the secretary.

## AUSTRALIA.

### Sydney.

A CASE of exophthalmic goiter has been observed here which is of interest owing to the fact that the patient comes from a mountain town where the supply of water is from a clear stream. Nine other cases in the village seem to be similar to those reported from Switzerland. Good results in this case are being obtained from the use of galvanism, ice-bag to the heart, and hydrotherapeutic measures.

### THE PLAGUE.

The total number of cases to May 21, the date of this communication, is 240 and the total number of deaths 83. There were 23 new cases reported this week and the same number last week. There are 100 cases now under treatment. On account of the small number of cases developing among contacts the Medical Association has asked the Premier that they be not quarantined and he has given the Sydney Board of Health power to use their own discretion in the various cases. Among the Chinese eight new cases developed, seven of which proved fatal. Now, an inspection of every Chinese residence in Sydney and its suburbs has been ordered. Some of the islands are apparently imposing a strict quarantine against vessels from Sydney. The *John Williams*, a ship of the London Missionary Society left here for Rarotouga of the Cook Islands, but on her arrival there no communiation with the shore was permitted.

## CANADA.

### Toronto.

### ASSOCIATION FOR TREATMENT OF TUBERCULOSIS.

A number of medical men and many other prominent citizens assembled in the City Hall, June 13, pursuant to the resolutions adopted by the Ontario Medical Association, for the formation of a provincial society for the prevention and treatment of tuberculosis. Toronto was established as the headquarters of the Association, with Dr. James Thorburn as president and Dr. P. H. Bryce as secretary.

### VICTORIA HOSPITAL FOR SICK CHILDREN.

The following summaries show the operations of this hospital during the year: Under treatment Oct. 1, 1898, 94; admitted during the year, 576; discharged, 519; died, 42; under treatment Sept. 30, 1899, 109; total, 670, of whom 376 were males and 294 females. There were 27 cases of typhoid fever during the year. This week over 100 of these little patients were conveyed over to their summer home on Toronto Island, the Lakeside Home, built through the generosity of Mr. John Ross Robertson, M.P.

### TORONTO GENERAL HOSPITAL.

The number under treatment in all departments of this hospitals which includes the Burnside Lying-in Hospital and the Andrew Mercer Eye and Ear Infirmary, on Oct. 1, 1898, was 267; admitted during the year 1899, 286; births in the hospital, 135; total number under treatment, 3388; discharges, including infants, 2922; died, 206; under treatment Sept. 30, 1899, 260. Of the 3388 persons treated during the year, 176 males and 111 females were inmates of the Andrew Mercer Eye and Ear Infirmary, and 302 in the Burnside Lying-in Hospital. The latter number includes 76 male and 59 female children born in the institution. There were 150 cases of typhoid fever and three of puerperal fever present in the year. The total revenue amounted to $76,633.13.

### ONTARIO MEDICAL COUNCIL.

The thirty-fifth annual meeting of the Medical Council of the College of Physicians and Surgeons of Ontario has been in session here the past week. The election of officers resulted as as follows: president, Wm. Britton, Toronto; vice-president, W. W. Dickson, Pembroke; registrar, R. A. Pyne, Toronto (re-elected); treasurer, H. Wilberforce Aikens, Toronto (re-elected); solicitor, B. B. Osler, Q. C., Toronto (re-elected); auditor, James Carlyle, Toronto. Resolutions were introduced in regard to inter-provincial registration, and referred to a special committee for a report, which has not yet been presented. The property committee recommended that the medical Council building in Toronto should not now be offered for sale. The new prosecuting officer reported that in the seven months since he assumed office, 63 cases had been handled, and 30 convictions had been secured with an average cost of $2.38 each. The Council refused to appoint a delegate to the board of governors of the Victorian Order of Nurses, as they considered it outside its jurisdiction. Under the discussion of charges of unprofessional conduct in the profession, two cases were considered; one was allowed to go on suspended sentence; the other was stricken from the rolls, because it was shown that he had advertised certain cures for tuberculosis. The case of the local practitioner who was mixed up with a "cancer doctor," was instructed to be further investigated. The following will comprise the discipline committee for the next year: Dr. J. L. Bray, of Chatham; Dr. V. H. Moore, Brockville; and Dr. Cl. T. Campbell, London. The executive committee was elected as follows: Dr. Britton, Toronto; Dr. Henderson and Dr. Dickson.

### TORONTO UNIVERSITY.

The first annual meeting of the alumni association was held on the afternoon of June 12, the president, Dr. R. A. Reeve, dean of the medical faculty, presiding. Arrangements were made for the publication of a journal in the interests of the university, to be called *The University of Toronto Monthly*. Dr. Reeve was re-elected president by acclamation. At the first alumni dinner in the evening four hundred were present. The chief speakers were Chief Justice Sir William R. Meredith, the new chancellor of the University, and Sir Charles Tupper, leader of the opposition in the Canadian House of Commons. The chancellor's address was listened to with the greatest attention, particularly that part relating to the trouble betwen the medical department and Trinity Medical College. He thought that, while the solution of these difficulties rested with the legislature of the province, the University would consider all complaints, carefully and wisely, but it would never agree of its own will, unles compelled by the Legislature, to surrender the medical faculty as a branch

of its work. He declared in favor of the University of the Province being a state institution. In connection with this matter it is understood that Trinity Medical College has appointed a committee to wait on the Senate with regard to amalgamation of the two faculties. On the afternoon of June 14, the degrees in medicine, arts, etc., were conferred on forty-four. At the alumni meeting Dr. Reeve called the attention of the members to the fact that the graduates of Toronto University in all departments now numbered something like 10,000, and it would be important for them to discuss and consider in the interval before the next annual meeting, the question of parliamentary representation.

## PARIS LETTER.

### MEDICAL TRIPS TO WATERING PLACES.

Dr. Carron de la Carrière, former interne of the Paris hospitals, is at the head of a scientific movement, which consists in undertaking every year a journey to the principal mineral waters of France. Last year 97 medical men, among whom could be counted a certain number of foreigners, such as Ehlers of Copenhagen, Vancleroy of Brussels, and Laache of Christiania, undertook this trip and visited Néris, La Bourboule, le Mont-Dore, St. Nectaire, Royat, Châtel-Guyon, Bourbon-l'Archambault, Bourbon-Lancy, St. Honoré, Pougues, the sanitarium of Durtol, and Vichy. Dr. Landouzy, who is professor of therapeutics at the Faculty of Medicine, was the scientific director of this excursion, and delivered lectures at each watering-place on its advantages, the qualities of the waters, the methods used, and the results obtained.

A similar excursion will be undertaken this year under the guidance of Dr. Landouzy, which will include the Southwestern bathing resorts: Bagnères de Suchon, Capvern, Bagnères de Bigorre, Argelès, Barèges, St. Sauveur, Cauterets, Eaux-Bonnes, Eaux-Chaudes, Saint Christan, Pau, Salies-de-Bearn, Biarritz, Cambo, Hendaye, Dax, Arcachon.

For American medical men in France for the exhibition this would not only be an easy way of acquiring information regarding these waters, but also an economical and delightful means of seeing one of the most beautiful parts of France, and the Pyrenees.

### RUBBER GLOVES IN SURGERY.

At the last meeting of the Society of Surgery a discussion was held on the use of gloves in operative surgery and the precautions necessary to ensure complete asepsis of the hands. Some surgeons declared that gloves were quite useless, while others maintained that they were a great element of security.

Another point discussed was whether a surgeon should operate when he has been in attendance on an infectious case during the preceding twenty-four hours.

Dr. Quénu, surgeon at the Cochin Hospital, referred to his last year's report, based on the statistics of this service during 1897 and 1898, and insisted on the following points: The patient should be bathed at least five or six times, and the last time, soap, alcohol and ether should be used. Rubber gloves should be worn, as complete asepsis is thereby obtained. They should, however, be used only in certain cases, such as operations on infected patients. When it is found necessary to do without them, on account of delicacy of touch needed during the operation, it will be found advantageous to put on sterilized gloves if one is obliged to operate soon after.

Dr. Quénu said that he used for his ligations rubber thread, as it was more easily sterilized than silk, was more compact, and stronger. Dr. Quénu's remarks brought forth some objections from Dr. Rochaud, who asked Dr. Quénu if he thought it wise for surgeons to visit dissecting-rooms. This was a veiled allusion to the fact that Dr. Quénu is chief of practical work at the dissecting-rooms belonging to the hospitals—the amphitheater of Clamart. Dr. Quénu answered that he did not consider the subjects used in dissecting work as very virulent, that the use of gloves while dissecting was sufficient protection, and that the chief of a surgical service should never attend autopsies. The discussion was taken up two weeks later by Dr. Bazy, who told the Society that, after having put his fingers into various virulent cultures, and washed his hands with the greatest care, he had performed laparotomy on four rabbits, and had handled their intestines. The rabbits, which he showed, made a speedy recovery. Four other rabbits were treated in like manner, without any antiseptic precautions being taken, and they all died in a few hours.

### MASSAGE OF THE HEART IN SYNCOPE.

Dr. Bazy, who has a wide reputation as a genito-urinary specialist, is a plain-spoken man, and does not believe in complicating operations too much. When Dr. Tuffier described his method of massage of the heart in syncope, during the administration of chloroform, and indicated how the incision should be made to uncover the heart, Dr. Bazy said: "Gentlemen, I have seen this operation carried out, and it was something awful to behold—*c'était effrayant.*

### MEDICAL EXHIBIT AT THE EXPOSITION.

The Assistance Publique, as it is called in Paris, i. e., the organization which sees to the care and sustenance of the sick and the poor, is the largest and most important body of its kind in the world. Its exhibit is in the Pavilion of the City of Paris, and is on the whole rather disappointing. Foreign physicians can best see the working of the hospitals by visiting the new wards opened in the Cochin and Enfants Malades Hospitals, or by inspecting the Boucicaut Hospital, which is the finest of its type in France. Among some rather dry material of the exhibit, such as graphic charts of infectious diseases, increase in the number of patients, etc., there are two relics of former times which will excite the interest of everyone. One is an old four-posted bed, in use at the Hôtel Dieu during the eighteenth century, which was sometimes used for four patients. Wax effigies represent the patients lying in bed, three of them being stretched out, and a fourth warming himself beside a brazier. The bed is covered with a species of canopy surrounded with red cloth curtains, and there is a green baize coverlet over the bed. On the other side of the room is shown the new style of iron bed, with iron and porcelain night-table, glass spittoon, and all the different modern articles in use in a hospital.

In the next room is the representation of the hole in the wall through which foundlings were passed into the Foundling's Hospital, or Hôpital des Enfants Assistés. This large opening was furnished with a cradle turning in a sort of large box. The woman who wished to abandon her child put it in the cradle, rang the bell, and the watchman inside the building made the box revolve on its pivot and took out the child. This is what was called in olden times a "tour," and was in use up to 1850. Since that time children are registered at a special office. Surgical instruments are also exhibited; some of which date from the time of Dupuytren.

### SMALLPOX AT LYONS.

Lyons has been having a rather severe epidemic of variola, to judge from the statistics furnished. From February 16 till April 30, there were 308 cases of smallpox with 66 deaths. As there were 12 deaths among patients outside the hospitals, this makes an average of 9 deaths a week. Since the beginning of May here has been an increase in the disease, as 77 new cases were reported from the 2d to the 9th of May.

### HEALTH OF PARIS.

In Paris there seems to be very few cases of smallpox and the general health of the city has remained quite satisfactory. This condition of the public health is of great importance, on account of the exhibition, as any rumor of an outbreak of plague or smallpox would precipitate a financial disaster.

# Correspondence.

## Hypothetical Questions in a Suit for Malpractice.

TOLEDO, OHIO, June 8, 1900.

*To the Editor:*—Recently in this city, in a malpractice suit, the following questions were asked:

Assuming that upon a surgical operation, through the usual incision for appendicitis, a surgeon finds the appendix normal, and the condition of the surrounding parts so satisfactory that he returns the appendix to its former position, and permanently closes the incision without drainage, by through-and-through silk-worm gut sutures, reinforced by buried kangaroo tendons, through the peritoneal parts, and immediately thereafter makes an incision in the median line, and removes a

ruptured tubal pregnancy, leaving the surrounding parts in such condition that he permanently closes the latter incision without drainage, with through-and-through silk-worm gut sutures, reinforced by buried kangaroo tendons, through the peritoneal parts, and within ten days thereafter, preceded by great abdominal pains, pus forces its way through the first incision in such quantities that a cotton pad one inch thick, by eight inches square, is to half its extent, twice a day saturated thereby, and such pus, without diminution, continues to discharge for the period of ninety days, to what would you, as a physician and surgeon, attribute the origin of such pus?

What would you do under such circumstances?

If the same conditions continued for four months, to what would you attribute the origin of such pus? What would you do, etc.?

If the same conditions existed for six months, to what would you attribute the origin of said pus? What would you do etc.?

If the same conditions existed for nine months, to what would you attribute the origin of said pus? What would you do, etc.?

If the same conditions existed for twelve months, to what would you attribute the origin of said pus? What would you do, etc.?

If, after eighteen (18) months, the same conditions, having continued to exist, the said first incision being opened up, and there should be found in the abdominal cavity, a cheese-cloth sponge, composed of eight layers of cheese-cloth 2½x3 inches in size, saturated by pus, and the same had been in said cavity from the time of the first incision, to what would you attribute the origin of said pus, so discharging during said eighteen months?

The grounds for the suit as alleged by the plaintiff are sufficiently well outlined by the questions. The legal points which the plaintiff undertook to prove were lack of ordinary care and skill in making the operation, and inattention, neglect, and lack of ordinary skill in the care of the patient after the operation.

Medical experts were examined on the steps of an ordinarily skilful operation, the amount of pus which an infected kangaroo tendon would or could cause to be secreted but the question which caused experts the most trouble, was to fix a time after an operation where, if conditions as mentioned in the hypothetical question had supervened, they would cease to wait for nature to right the trouble, and whey would seek to do so by surgical means. The examination of one expert elicited the fact that he himself had in one instance waited for six years for nature to discharge a suture which he had introduced during the operation. Only the experts for the plaintiff were heard, as at the close of the plaintiff's evidence the defendant moved to dismiss the case because the statute limitation had expired before the proceeding had been begun, and the court so held.

One of the most powerful influences, because the most subtle, which leads to the physician's decision in such a case is a purely psychologic one, and one which he ought always to be on the lookout for. There can be no question that a physician will, with less personal disquiet, invoke surgical influences in such a case as the above, if it be referred to him, than in a case of his own. And where a physician's desire is strong in a given direction, it is astonishing how that desire will cover up unwelcome symptoms, and how it will exaggerate the diagnostic and prognostic value of intercurrent and unimportant ones.

The case is to be carried up on error.

JAMES L. TRACY.

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## Value of the Medical Visit.

ST. LOUIS, June 14, 1900.

*To the Editor:*—The following is one of many letters which I have received since the publication of my communication on "The Value of the Medical Visit" in THE JOURNAL of June 2. (p. 1430):

TOLEDO, June 7, 1900.

C. H. HUGHES, M.D.:
ST. LOUIS, MO.:

*My Dear Doctor:*—Kindly tell me if you ever knew a physician who did or could carry into practice the very truthful propositions of what ought to be done, as outlined in your letter in THE JOURNAL.

I believe it is a fact that, in this city, a recent graduate is more likely to demand a good fee than is the man whose long experience should entitle him to it, and I think that the universal practice is to charge one price for a visit.

Respectfully, ———.

Replying to this and many other letters, I would say that I always estimate a visit according to what I do for the patient; according to the time spent with him and lost from my office or hours of study and investigation; according to the time passed since I graduated; according to the ability or non-ability to compensate for full value of service; according to special manipulative and technical skill demanded and the value of advice given, as growing out of the facts learned and the skill and experience possessed.

For all to charge one price for a visit is to rob experience of its due value, and younger medical men of legitimate opportunity in practice.

C. H. HUGHES, M.D.

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## Medical Transactions.

HARTFORD, CONN., June 16, 1900.

*To the Editor:*—Volumes of transactions of medical societies are very often disappointing to the reader. It is a question whether the publication of such volumes has more than a mere local interest. The criticism often made of the papers of the AMERICAN MEDICAL ASSOCIATION is that they have only a personal and local interest, and rarely rise to the height of being real contributions to the literature of the subject. This was true in some cases years ago, but there has been a gradual and well-marked improvement since THE JOURNAL began to publish these papers. Each year's transactions show a larger proportion of well-rounded, thoroughly-studied papers, and this is the secret of the increasing respect which the ASSOCIATION is receiving in all quarters. State and local associations, whose published volumes of transactions are increasing rapidly year after year, have a local interest which should be encouraged. While many of them are but little above the ordinary journal in their ephemeral character, their value undoubtedly is more to the author than to the reader. As studies of psychology and the growth of medical thought and practice, they are exceedingly interesting.

A study of the transactions of different states is very interesting and is probably on a par with the sermons of the divines of a hundred years ago. Papers read in these local and state societies, when confined to epidemics and discussion of local conditions falling under the observation of the author, have great value, but when the author goes out into the field of medicine, discusses larger topics and draws weighty conclusions concerning scientific theories and movements, the value of his contribution is lost. The most valuable papers ever presented to the AMERICAN MEDICAL ASSOCIATION were local personal studies of diseases and methods of treatment which the author had discovered and tested in his experience. If they were extreme and unsupported by other deductions, or contrary to the present experience, the test of time always brought them into prominence or forgetfulness. An author who gives his personal experience, with the facts on which it is based, no matter what transactions it may be published in, is sure of recognition if his conclusions are correct.

The value of these local transactions is more largely in the culture and practice which it brings to the author in putting his ideas into print. Until recently papers of this class were almost the only biographical data which could be found regarding physicians at death. A recent critic has very severely commented on the uselessness of many of these volumes of state and society transactions. This is only partially true, for while it may have only slight value outside of the vicinity, it certainly is worth the publication and the effort to perpetuate it. The same critic has found in volumes of transactions of societies of specialists a dreary waste of words and unfounded theories. This is also an error, although some articles written by specialists abound in technical terms in such a profusion as to indicate darkening counsel with words. A few text-books are marred by this defect. The reader is obliged to get down a modern dictionary to follow the author.

and when, with great labor, he has discovered the meaning, it is trivial and unimportant.

The literature of medicine has attained such proportions that it attracts an army of writers who seek to appear on the printed page rather than to become instructors or teachers of new facts. Our ASSOCIATION meetings are gradually drawing the lines, trying to eliminate writers who have nothing to say and writers who serve up old theories without the flavor of novelty or personality. This is being accomplished in the Sections very largely. Better papers are called for, and shorter time is given, forcing the writer to condense what he has to say, to the great satisfaction of the listener. At the International Congresses at Moscow, and elsewhere, this great defect of inferior papers bids fair to destroy their usefulness. At Paris an effort will be made to check this in some measure, but the difficulty is very great. Large numbers of men will insist on reading papers that contain no new facts, to the disgust of those who have real contributions. At the meeting at Atlantic City, the officers of several sections made strenuous efforts to raise the grade of the papers offered and to keep out old discussions of common-place subjects unless by men of acknowledged ability. Authors of papers should never forget that the scope of the AMERICAN MEDICAL ASSOCIATION is far broader than that of little sectional gatherings.

Through the columns of THE JOURNAL, papers come before thousands of the best men in the profession, and unless these authors have something to say and say it briefly and clearly, their efforts will be unnoticed. In a local medical society or in a state society the personality of essayists will attract readers and attention, and the transactions in which these papers are published will keep up a personal interest not noticed otherwise. It is an error to suppose that a paper which is praised at the local society will receive equal praise when brought before the general profession. Many a man has become disgusted at not receiving the attention for his contribution before the AMERICAN MEDICAL ASSOCIATION which was granted to him by his local society, and has attributed it to jealously and ring rule. Many of the bitter enemies of our ASSOCIATION have become deluded with this idea and have become bitter detractors. Notwithstanding this, the ASSOCIATION goes on, aiming to be national in its efforts and work, and broad and catholic in its recognition of scientific facts everywhere. The seeker for mutual admiration and the mutual admiration society should confine his efforts to his local society and live in its transactions. T. D. CROTHERS, M.D.

# Book Notices.

DISEASES OF THE GALL-BLADDER AND BILE-DUCTS, INCLUDING GALL-STONES. By A. W. Mayo Robson, F.R.C.S., Senior Surgeon to the General Infirmary at Leeds, assisted by Farquhar Macrae, M.B., C.M. (Glas.). Second Edition. Cloth. Pp. 313. Price, $3. New York: William Wood & Co. 1900.

This second edition of Mayo Robson's lectures on "Diseases of the Gall-Bladder and Bile-Ducts" contains, in addition to the former contents, chapters on Membranous Cholecystitis and on Gall-Stones, and numerous additions thoroughout the text. The cases have been classified, instead of being all grouped together at the end of the work, of which they take up about one-fourth or one-third in tabulated form. The series illustrates the advance that has been made in the surgery of this region, and the much more favorable results of late years.

DISEASES OF THE NOSE AND THROAT. By J. Price-Brown, M.B., L.R.C.P.E., Member of the College of Physicians and Surgeons of Ontario; Laryngologist to the Toronto Western Hospital; Laryngologist to the Protestant Orphans' Home; Fellow of the American Laryngological, Rhinological, and Otological Society; Member of the British Medical Association, the Pan-American Medical Congress, the Canadian Medical Association, the Ontario Medical Association, Etc. Illustrated with 159 Engavings, including 6 Full-Page Color-plates and 9 Color-cutes in the text. Cloth. Pp. 470. Price, $3.50. Philadelphia: The F. A. Davis Co. 1900.

This handsome volume, by a prominent Canadian physician, is a very valuable addition to the literature of diseases of the nose and throat. The author has given the results of his experience, as a specialist and general practitioner, with these affections, in a practical way that can not but be of value to the student and practicing physician. Certain subjects which are generally included are omitted, for reasons stated by the author in his preface. Aural affections, for example, which are usually included with diseases of the nose and throat, are only incidentally touched upon, and the subject of diphtheria is entirely left aside. The only omissions, however, which might have been better avoided are some slight ones in regard to special points, such, for example, as the use of suprarenal extract, which certainly has a place in works on nose and throat diseases, but which we do not here find alluded to. It it not a work to post a person fully on the subject if we give it its usual limits, but so far as it goes it is a most valuable addition to the literature.

THE IRRIGATION TREATMENT OF GONORRHEA: ITS LOCAL COMPLICATIONS AND SEQUELÆ. By Ferd C. Valentine, M.D., Professor of Genito-Urinary Diseases, New York School of Medicine. Illustrated by fifty-seven engravings. Cloth. Pp. 221, Price, $2. New York: William Wood & Co. 1900.

The object of this work, according to the author's statement at the close, is to "place before those physicians who may not be thoroughly familiar therewith:

1. The rationale and technique of irrigations in acute gonorrhea.

2. The advantages of dilatations and irrigations in chronic gonorrhea.

3. The dangers of uncured gonorrhea, and the means of locating the foci of the disease, especially after its external manifestations have subsided.

4. To urge physicians to use their influence for the dissemination of a better understanding of the disease.

Comparatively few text-books treat of this special therapeutic method in this disease, the importance of which has only of late been fully appreciated. As the book is intended for the general practitioner, to whom it is dedicated by the author, it will, without doubt, fill a very useful place in medical literature. It is clearly written, very fully illustrated, and covers the subject in an exhaustive way. We trust the general practitioner will appreciate and utilize it.

HOME NURSING. MODERN SCIENTIFIC METHODS FOR THE CARE OF THE SICK. By Eveleen Harrison. Cloth. Pp. 325. Price, $1. New York: The Macmillan Co. London: Macmillan & Co., Ltd. 1900.

This little work contains a description of the general principles and methods of nursing as applied to the home care of the sick, and, therefore, ought to serve a very useful purpose. There are many cases, as the author says, where the trained nurse is not really required, and many others where the expense is an unsurmountable bar to her employment, and it is for such cases as these that the book is designed. So far as we can see, it contains a very valuable amount of information excellently given, and can not help but be of service. There are one or two cases where we might take exception. It is possible that some of the directions in regard to poisoning are too general. In the main, however, the author is safe in her recommendations, and the book can be most heartily indorsed, as a whole, for the purpose for which it is intended.

SERUMTHERAPY. Published by the Scientific Department of Frederick Stearns & Co., Detroit, Mich.

This brochure of fifty pages contains matter of interest regarding serumtherapy, how antitoxin serums are produced, directions for the collection and transmission of specimens of sputum, etc., for bacteriologic examinations, and other valuable information.

ANESTHETICS: THEIR USES AND ADMINISTRATION. By Dudley Wilmot Buxton, M.D., B.S., Member of the Royal College of Physicians. Third Edition. Cloth. Pp. 320. Price, $1.50. London: H. K. Lewis. Philadelphia: P. Blakiston's Son & Co. 1900.

This volume is the third edition of a comparatively well-known English work, which has been out of print some time, revised and brought up to date. The main additions are descriptions of methods of giving nitrous oxid in combination with oxygen, ether in combination with oxygen, Dr. Flux's open method of giving nitrous oxid, Schleich's methods of local

and general anesthesia, and Bier's method of intrathecal cocainization, but which should be more properly credited to Corning, our own countryman. The methods also for prolonging anesthesia under nitrous oxid are noticed. For a convenient manual on the general subject, it will serve a useful purpose.

# Deaths and Obituaries.

RESOLUTIONS ON DEATH OF DR. MILLER.

The following resolutions on the death of Dr. Truman W. Miller, which was noticed in THE JOURNAL, June 2, were passed by the ASSOCIATION at its recent meeting:

WHEREAS, On the eve of this annual meeting, Dr. Truman W. Miller, vice-president of the Board of Trustees, departed this life; and

WHEREAS, During his many years of membership and office in this ASSOCIATION, Dr. Miller had by his force of character his business ability and his untiring energy rendered valuable services to it; and

WHEREAS, During his long career in the practice of medicine, covering thirty-seven years, and reaching from the Civil War, in which he served as surgeon, until a few months ago, when he was stricken by his final illness, he had occupied a front rank in our profession, particularly as an educator and as a friend and counselor of younger members; and

WHEREAS, By his personal traits of character, his integrity, his good-heartedness and his readiness to help and advise, he had endeared himself to all who knew him; therefore be it

*Resolved*, That the AMERICAN MEDICAL ASSOCIATION deeply deplores his loss to the medical profession and to itself, and extends to his family its sincere sympathy and condolence.

WILLIAM PIERSON, M.D., New York University, 1852, died at his home in Orange, N. J., June 12. He was born Nov. 20, 1830, and was the eldest son of Dr. William Pierson, whose name was long prominent in the medical annals of his state. He was secretary of the New Jersey State Medical Society for thirty years, afterward its vice-president for an extended term, and at the recent annual meeting in Atlantic City was elected its president. He was the attending physician to the St. Michael's and St. Barnabas' hospitals and medical director of the Orange Memorial Hospital.

RAPHAEL EDMONSTON, M.D., died in Manila, June 5, aged 27 years. He was graduated from the medical department of the Georgetown University in 1897, and during the Spanish-American War received an appointment of assistant-surgeon. In February, 1899, he was ordered to the Philippines, where he was engaged throughout the Luzon campaign.

ELDRIDGE K. LEONARD, M.D., licentiate of the Connecticut Medical Society, of which body he was also a member, died at his home in Rockville, Conn., June 13, aged 69 years. Dr. Leonard assisted the late Dr. Storrs, of Hartford, Conn., in an operation two weeks previously and contracted septicemia. The case was a hepatic abscess.

GEO. H. TREBEL, M.D., Hamilton, Ind., died June 9, aged 35 years. He was graduated from Capital University in Columbus, Ohio, also from Miami Medical College in Cincinnati. He had since practiced in Hamilton, with the exception of one year spent in study in Germany and France.

J. HARRIS OXNER, M.D., died in Rome, N. Y., June 8, aged 58 years. He was graduated from the medical department of the University of Michigan in the class of 1880, and had since practiced in Rome.

WILLIAM B. RIBBLE, M.D., Berkshire Medical College, Mass., class of 1849, died from cerebral apoplexy at his home in East Millstone, N. J., June 10. He was over 75 years of age, and was well-known as an active practitioner.

GEORGE M. BEAKES, M.D., Albany, 1856, died of paralysis at his home in Bloomingburg, N. Y., June 16. He served during the Civil War as a surgeon of the Fifty-sixth N. Y. Vol. Infantry.

JOSEPH BEJACH, M.D., assistant physician in the St. Louis Hospital, died June 9. He was a graduate of the medical department of Washington University, class of 1899.

EDWARD MARIS, M.D., Jefferson Medical College, 1856, died at his home in Philadelphia, June 13, aged 68 years.

J. E. KIMBALL, M.D., died in Nashua, N. H., June 8, aged 41 years. He was graduated from the medical department of the University of Vermont in 1886.

# Miscellany.

**The Abortive Treatment of Suppuration of the Eyeball.**—In the treatment of suppuration of the eyeball from various causes, Snell (*The Lancet*, March 31, 1900, p. 925), after the administration of ether, divides the cornea with a cataract-knife or with Beer's knife, unless it is already destroyed. He then removes the remains of the cornea up to the sclera with scissors. The remaining contents of the globe of the eye are extracted with forceps, and the interior of the globe is cleansed with Mules' scoop, or cotton-wool and forceps may be employed to wipe out the contents. Finally, sublimate solution is freely syringed into the cavity of the eye until all of the contents have been removed or washed away, and only the bared sclerotic remains. Gauze is lightly packed into the eyeball and a bandaged is applied. The dressings are changed on the night after the operation, and during the next few days the eye is syringed twice a day and the gauze reapplied.

## NEW PATENTS.

Patents of interest to Physicians, June 5 and 12.

650,822. Ligature tier. Milton Cain, Jarbolo, Kan.
650,933. Disinfectant composition. Eugene Fournier, Paris, France.
651,310. Bed or douche pan. Daniel Hogan, New York City.
651,047. Sprayer or atomizer. Clinton H. Leggett, New York City.
651,048. Sprayer or atomizer. Clinton H. Leggett, New York City.
651,150. Vaporizer. James H. Valentine, Chatham, N. J.
651,061. Diamidonaphthol. Arthur Weinberg, Frankfort-on-the-Main, Germany.
32,788. Design. Bed pan. Daniel Hogan, New York City.
651,777. Electrotherapeutic apparatus. Fred H. Brown, Chicago.
651,346. Making cyanids. August Dziuk, Hanover, Germany.
651,605. Hospital buggy. Louis E. Hoffman, Cleveland, Ohio.
651,761. Device for lifting and moving the sick. Charles W. Jones, Grand Rapids, Mich.
651,717. Apparatus for concentrating sulphuric acid. Jacques L. Kessler, Clermont-Ferrand, France.
651,738. Invalid's bed. Samuel Nicholls, Sr., Kenesaw, Neb.
651,470. Speculum. Charles J. Philling, Lansdowne, Pa.
651,472. Electrical appliance for the cure of deafness. Wm. J. Tindall, New York City.

## CHANGE OF ADDRESS.

Dr. A. L. Anderson, from 912 Walnut St. to Rookery Bldg., Kansas City, Mo.
Dr. F. F. Bryan, from Newberry Hotel, Chicago, to Georgetown, Ky.
Dr. C. Bell, from Charlottesville, Va., to 1909 G St. N. W., Washington, D. C.
Dr. C. Zimmer Corns, from Delmar to Sheffield, Ala.
Dr. J. A. Corn, from Clifton, Kan., to City Hospital, Kansas City, Mo.
Dr. C. J. Carson, from 2400 Dearborn St., Chicago, to Marten Blk., Marshall, Mich.
Dr. H. B. Citron, from 56 E. 3d St., New York City, to 80 Columbia St., W. New Brighton, N. Y.
Dr. G. N. Drysdale, from Crescent City to Yreka, Cal.
Dr. R. J. Danner, from Louisville, Ky., to Elnora, Ind.
Dr. H. M. Farney, from Shukert Bldg. to 3814 Windsor St., Kansas City, Mo.
Dr. O. A. Fliesburg, from Minneapolis to North Branch, Minn.
Dr. L. G. Frankenthal, from 3236 Michigan Ave. to 48th and Kimbark Ave., Chicago.
Dr. B. Getzlaff, from 126 Division St., Benton Harbor, Mich., to 368 Larrabee St., Chicago.
Dr. M. D. Gibbs, from Victor to Altman, Colo.
Dr. E. M. Hurst, from Mt. Meridian to Cloverdale, Ind.
Dr. M. O. Heckard, from 1251 to 1276 W. Madison St., Chicago.
Dr. H. P. Howard, from Alexandria to Burkes Garden, Va.
Dr. E. M. Holmes, from Readyville to Bradyville, Tenn.
Dr. W. S. Hamilton, from Chicago, Ill., to Norman, O. T.
Dr. H. S. Herr, from 1195 Pearl St. to 57 Marvin Ave., Cleveland, Ohio.
Dr. P. H. Irish, from Minneapolis to Brainerd, Minn.
Dr. E. A. Irwin, from Chicago, Ill., to Boulder, Mont.
Dr. G. P. Kerrigan, from 358 Ogden Ave. to 241 S. Hoyne Ave., Chicago.
Dr. H. C. Johnson, from 2601 Calumet Ave., Chicago, Ill., to 13 6th St., Fond du Lac, Wis.

Dr. J. A. Jeffries, Jr., from Charlottesville to Warrenton, Va.
Dr. W. A. Logan, from Louisville, Ky., to Bryan, Ala.
Dr. W. E. Brown, from Coolville, Ohio, to Taylorsville, Ill.
Dr. A. Lukens, from 1068 Lexington St., New York, to Pelham, N. Y.
Dr. S. J. Liebman, from 222 E. Broadway to 660 E. 173d St., New York City.
Dr. J. F. Liken, from 2302 Cherry St. to 424 Melrose Ave., Toledo, Ohio.
Dr. T. W. Morgan, from 41 Laflin St., Chicago, to Dawson, Ill.
Dr. J. H. Miller, from 1901 Jefferson St., Baltimore, Md., to Pana, Ill.
Dr. L. MacKenzie, from 143 Robert St., Toronto, Canada, to Dwight, Ill.
Dr. G. W. Mahoney, from Venetian Bldg. to Room 306, 100 State St., Chicago.
Dr. T. S. K. Morton, from Philadelphia, Pa., to Honnedaga, N. Y.
Dr. C. S. Maxwell, from Kenansville to Mt. Olive, N. C.
Dr. E. L. McCrea, from Lamar, Mo., to Table Rock, Neb.
Dr. J. B. Mears, from Charlottesville to Keller, Va.
Dr. H. C. Miller, from Detroit, Mich., to Gibbs Blk., Findlay, O.
Dr. F. E. North, from Chattanooga, Tenn., to Cal. Woman's Hospital, San Francisco, Cal.
Dr. G. W. Nihart, from Mendon to Petoskey, Mich.
Dr. H. Nichell, from 80 Sycamore St. to 27 Days Park, Buffalo, N. Y.
Dr. C. A. O'Quinn, from Dupont to Mayday, Ga.
Dr. E. D. Powell, from Winona to Elliott, Miss.
Dr. J. N. Rape, from Tchula to Moss Point, Miss.
Dr. F. D. Reames, from Portland to Klamath Falls, Ore.
Dr. T. J. Stiver, from 1640 Wilson St. to Masonic Temple, Denver, Colo.
Dr. G. T. Spearman, from Hamilton to Leon Junction, Texas.
Dr. J. W. Shaffer, from Sandusky, Ohio, to Cartwright, Pa.
Dr. W. H. Valentine, from Minneapolis to Tracy, Minn.
Dr. O. J. Westlake from 408 E. 12th St. to 1010 Main St., Kansas City, Mo.

# Queries and Minor Notes.

REQUIREMENTS FOR PRACTICE IN NEW JERSEY.

ELMIRA, N. J., June 14, 1900.

*To the Editor:*—Will you kindly inform me regarding the requirements for the practice of medicine in the State of New Jersey?

M. C. B.

ANSWER:—The requirements in New Jersey are: 1. Evidence that the applicant is over 21. 2. Certificate of moral character from at least two physicians in good standing, one a resident of the State. 3. Graduation from a reputable literary or scientific college, high school, or academy, or a preliminary examination covering the subjects required by the board. The certificate of academic education must accompany the application. 4. A diploma from a legally incorporated medical college recognized in good standing by the board at the time of issue of the diploma in the United States, or a diploma conferring a full right to practice in all branches in some foreign country, and evidence that the applicant has studied medicine four years, including three courses of lectures in different years in a legally incorporated foreign or American medical college prior to granting of said diploma. 5. Examination by board of medical examiners which is given the third Tuesday and Wednesday of June and September of each year. The application for blank forms should be made to the secretary of the board, Dr. E. L. B. Godfrey, Camden, N. J.

LAWS GOVERNING THE PRACTICE OF MEDICINE.

GRAND RAPIDS, O., June 12, 1900.

*To the Editor:*—Will you please tell me where I can find the laws governing the practice of medicine in the different states? I especially wish to know the law governing the practice in the States of California and Utah. Respectfully, C. B. C.

ANSWER:—The latest full statement of the requirements for practice in the states is in the report of the Illinois State Board of Health for 1898. To practice in California a diploma from a regular medical college in good standing is required. It should be forwarded to the board of examiners, of which C. C. Wadsworth, 1104 Van Ness Ave., San Francisco, is the secretary. The fee is $5. At the present time three full courses of lectures are required of the applicant before receiving a diploma. In Utah, both the diploma and an examination by the board of examiners are required. Examinations are held in Salt Lake City on the first Monday of January, July and October. The secretary of the board of examiners is Dr. Briant Stringham, Salt Lake City.

# The Public Service.

## ARMY CHANGES.

Movements of Army Medical Officers under orders from the Adjutant-General's Office, Washington, D. C., June 2 to 6, 1900, inclusive:

Edward T. Comegys, major and surgeon, U. S. A., leave of absence granted.

Michael E. Hughes, acting asst.-surgeon, relieved from duty in the Department of Porto Rico; at the end of his present leave of absence he will proceed from Adams, Mass., for duty in the Department of California.

Frank R. Keefer, major and surgeon, U. S. V., from San Francisco, Cal., to Washington, D. C., reporting for instructions to the surgeon-general.

James P. Kimball, lieut.-col., deputy surgeon-general, U. S. A., leave of absence granted.

Ben H. Metcalf, acting asst.-surgeon, from Winthrop, Mass., to duty at Fort Banks, Mass.

Samuel O. L. Potter, major and surgeon, U. S. V., now at San Francisco, Cal., to temporary duty in the Department of California.

Elmer A. Scherrer, acting asst.-surgeon, leave of absence from the Department of California extended.

Rodney D. Smith, acting asst.-surgeon, from Blooomington, Ind., to the Department of California.

Samuel M. Waterhouse, lieutenant and asst.-surgeon, U. S. A., from Fort Banks, Mass., to duty at Fort Meade, S. D.

Roy A. Wilson, acting asst.-surgeon, to Fort Slocum, N. Y., to accompany recruits to San Francisco, Cal., and return to his proper station, Fort Totten, N. Y.

Charles K. Winne, major and surgeon, U. S. A., member of a board to meet at Sheridan, Wyo., to examine into and report upon the most suitable site for a permanent military post on the military reservation near that place.

DEATH

General McArthur cabled from Manila, P. I., June 5, 1900, notice of the death of Lieut. Raphael A. Edmonston, asst.-surgeon, 34th Vol. Inf. of carbunculosis of face.

## NAVY CHANGES.

Changes in the medical corps of the U. S. Navy for the week ending June 9, 1900.

P. A. Surgeon A. M. D. McCormick, detached from the *Montgomery* and ordered to the *Chicago*.

Asst.-Surgeon J. H. Whiting, detached from the *Chicago* and ordered to the *Montgomery*.

P. A. Surgeon W. C. Braisted, ordered to the *Massachusetts* immediately.

P. A. Surgeon L. L. Von Wedekine, detached from the *Richmond* and ordered to the *Indiana* immediately.

Pharmacist S. W. Douglas ordered to additional duty on the *Massaseit*.

## MARINE-HOSPITAL CHANGES.

Official list of the changes of station and duties of commissioned and non-commissioned officers of the U. S. Marine-Hospital Service for the seven days ending June 7, 1900.

Surgeon C. E. Banks, granted leave of absence for two months and 20 days from July 1, 1900.

Surgeon D. A. Carmichael, relieved from duty in the U. S. Consulate, and directed to assume command of the quarantine service at Honolulu, H. I., on June 14.

Asst.-Surgeon Taliaferro Clark, relieved from duty at the Tortugas quarantine station, and directed to proceed to Washington, D. C.

Asst.-Surgeon John McMullen, directed to assume command of the Tortugas quarantine station.

Asst.-Surgeon J. W. Amesse, directed to proceed to Honolulu, H. I., and report to Surgeon D. A. Carmichael for duty.

Acting Asst.-Surgeon L. C. Bean, granted leave of absence for 10 days from June 4.

Acting Asst.-Surgeon John E. Bready, granted leave of absence for 7 days from June 16.

Acting Asst.-Surgeon W. J. O'Reilly, granted leave of absence for 5 days from June 1.

Acting Asst.-Surgeon C. F. Ulrich, granted leave of absence for 29 days from June 1.

Hospital Steward and Chemist W. F. Macdowell, directed to report at the bureau for instructions preliminary to departure for Havana, Cuba.

Hospital Steward F. R. Hanrath, granted leave of absence for two months, on account of sickness, from date of being relieved from duty.

Hospital Steward S. W. Richardson, directed to rejoin station at St. Louis, Mo., and then to proceed to Savannah and Waycross, Ga., for special temporary duty.

Hospital Steward Myron R. Mason, relieved from duty at Portland, Me., and directed to proceed to Dutch Harbor, Alaska, and report to medical officer in command for duty and assignment to quarters.

Hospital Steward J. E. Beck, relieved from duty at San Francisco, Cal., and directed to proceed to proceed to Fort Stanton, N. M., and report to medical officer in command for duty and assignment to quarters.

## HEALTH REPORTS.

The following cases of smallpox, yellow fever, cholera and plague have been reported to the Surgeon-General, Marine-Hospital Service, during the week ended June 16, 1900.

SMALLPOX—UNITED STATES

California: Oakland, May 12 to June 2, 5 cases.

Colorado: Arapahoe Co., May 28 to June 4, 1 case; Archulita Co., May 28 to June 4, 1 case; El Paso Co., May 28 to June 4, 2

cases; Logan Co., May 28 to June 4, 1 case; Mesa Co., May 28 to June 4, 1 case.
Delaware: Wilmington, June 2-9, 1 case.
District of Columbia: Washington, June 2-9, 4 cases.
Illinois: Cairo, May 26 to June 2, 4 cases; Chicago, June 2-9, 4 cases.
Indiana: Evansville, June 2-9, 1 case.
Kansas: Wichita, June 2-9, 5 cases.
Kentucky: Covington, June 2-9, 28 cases.
Louisiana: New Orleans, June 2-9, 41 cases, 21 deaths.
Maine: Portland, June 2-9, 4 cases.
Massachusetts: Fall River, June 2-9, 9 cases; Lowell, June 2-9, 1 case.
Michigan: Grand Rapids, June 2-9, 1 case; Jackson, June 2-9, 1 case.
New Hampshire: Manchester, June 2-9, 2 cases.
New York: New York, June 2-9, 4 cases.
North Carolina: Newbern, June 6, Several cases.
Ohio: Cleveland, June 2-9, 22 cases.
Tennessee: Memphis, May 20 to June 2, 13 cases.
Utah: Salt Lake City, June 2-9, 2 cases.

SMALLPOX—FOREIGN.

Austria: Prague, May 19-26, 5 cases.
Belgium: Ghent, May 19-26, 1 death.
Egypt: Cairo, May 12-20, 4 deaths.
England: Liverpool, May 19-26, 1 case, 2 deaths; London, May 19-26, 5 cases.
France: Paris, May 19-26, 1 death.
Mexico: Chihuahua, May 26 to June 2, 2 deaths.
Philippines: Manila, April 21-28, 3 cases, 7 deaths.
Russia: Moscow, May 12-19, 11 cases, 2 deaths; Odessa, May 19-26, 7 cases, 1 death; St. Petersburg, May 12-19, 33 cases, 10 deaths.
Straits Settlements: Singapore, April 21-28, 2 deaths.

YELLOW FEVER.

Colombia: Panama, May 29 to June 5, 3 cases.
Cuba: Havana, May 26 to June 2, 3 cases.
Mexico: Vera Cruz, May 26 to June 2, 9 deaths.

CHOLERA.

Siam: Bangkok, April 19, Epidemic.

PLAGUE.

China: Hongkong, April 28 to May 5, 34 cases, 32 deaths.
Egypt: Alexandria, May 12-19, 3 cases, 1 death; Port Said, April 20 to May 28, 41 cases, 21 deaths.
Philippines: Malabon, April 20, 2 cases; Manila, April 7-28, 41 cases, 30 deaths; San Pedro Macote, April 20, Reported.

# Current Medical Literature.

Titles not marked with an asterisk (*) are noted below.

**Medical Record (N. Y.), June 9.**

1.—*Cholecystectomy for Gall-Stones. C. D. Gibson.
2.—*Acute Suppurative Folliculitis of the Scalp. Wm. S. Gottheil.
3.—*Effect of Summer Heat upon the Public Health. Henry D. Chapin.
4.—*Seasickness and What to do With It. Herman Bartsch.

**Philadelphia Medical Journal, June 9.**

5.—*Endowment of Medical Colleges. W. W. Keen.
6.—*Conclusions Reached After Study of Typhoid Fever Among American Soldiers in 1898. Victor C. Vaughan.
7.—*Criticism in Medicine. George Dock.
8.—*Gastric Ulcer: Nonperforating-Hemorrhage. Wm. L. Rodman.

**New York Medical Journal, June 9.**

9.— Clinical and Pathological Observations on Some Early Forms of Epithelioma of the Skin. J. A. Fordyce.
10.— Some New Traction Apparatus for Hip Disease, Pott's Disease, Etc. R. Tunstall Taylor.
11.—*"Estivo-Autumnal Fever" in New Orleans, Summer and Autumn, 1899 (concluded). H. A. Veazie.
12.—*Treatment of Opium Habit by Bromid Method. Archibald Church.
13.—*Collection, Preservation and Transportation of Clinical Material for Laboratory Examination. Stuart Hart.
14.—*Ethlyic Bromid as Anesthetic for Short Operations. Paul F. Sondern.

**Boston Medical and Surgical Journal, June 7.**

15.—*Chairman's Address before the Section on Practice of Medicine. George Dock.
16.—*Clinical Report of Cases of Infection due to Bacillus Aerogenes Capsulatus of Welch. Paul Thorndike.
17.—*Report of Cases in which Bacillus Aerogenes Capsulatus was found. Joseph H. Pratt.
18.—*New Method of Intra-Abdominal Operation for Retroverted Uteri. George W. Kaan.
19.— New Nasal Scissors for Removal of Lower Turbinate. Carolus M. Cobb.

**Medical News (N. Y.), June 9.**

20.—*President's Address before the AMERICAN MEDICAL ASSOCIATION. W. W. Keen.

**Cincinnati Lancet-Clinic, June 9.**

21.—*Medical Treatment of Gall-Stones. Edward S. Stevens.
22.— Eye-Strain. Louis Stricker.
23.— Appendicitis: Its Etiology and Treatment. J. Ambrose Johnston.

**Medical Review (St. Louis, Mo.), June 2.**

24.—*What not to do in Ear, Nose and Throat Work. M. A. Goldstein.
25.— Case of Multiple Malignant Lymphoma (or Hodgkin's Disease). J. W. Smith.

**American Practitioner and News (Louisville, Ky.), May 1.**

26.— Some Sociologic Problems for the Medical Man. Ernest G. Mark.

**Railway Surgeon (Chicago), May 29.**

27.—*Traumatic Lumbago. Howard J. Williams.
28.— Membranous Conjunctivitis. Thomas McDavitt.
29.— Alcohol as Neutralizer of Poisonous Effects of Carbolic Acid on Tissues. C. H. Richardson.

**Annals of Ophthalmology (St. Louis, Mo.), April.**

30.—*Ocular Findings in Study of Twenty-three Cases of Epidemic Cerebro-Spinal Meningitis. Burton K. Chance.
31.— Hemianopsia, Half-Blindness. Its Forms, Anatomy, Etiology, Diagnosis, Prognosis and Therapy (continued). Hermann Schmidt-Rimpler.
32.—*Lesions of Frontal Sinus and Anterior Ethmoidal Cells and Their Surgical Management. Robert Sattler.
33.— Vesicular Keratitis Following Cataract Extraction. Report of Case. Edgar S. Thomson.
34.—*Case of Reflex Amaurosis. H. C. Sloggett.
35.— Anisometropia and Normal Refraction. Carl Schulin.

**Therapeutic Gazette (Detroit, Mich.), May 15.**

36.— Treatment of Simple Fracture of Femur; with Especial Reference to Methods in Use at the Pennsylvania Hospital and Remarks upon Asymmetry in Relation to Shortening After Fracture. Thomas G. Morton.
37.— Frequent and Unavoidable Deformity from Fracture in Upper Third of Shaft of Femur. Oscar H. Allis.
38.— Treatment of Fractures of Femur in Children. Henry R. Wharton.
39.— Operative Treatment of Fractures of Femur. Gwilym G. Davis.
40.— Ultimate Results of Fracture of Femur. Edward Martin.

**American Journal of Medical Sciences (Philadelphia), June.**

41.—*Surgical Anatomy of Congenital Dislocation of Hip-Joint. Edward H. Nichols and Edward H. Bradford.
42.—*Fifth Case of Family Periodic Paralysis. Leo M. Crafts.
43.—*Permanent Non-Progressive Ataxia, with Clinical Report of Three Cases. Sanger Brown.
44.—*Spinal Cord Changes in Paralysis Agitans. Max. Nonne.
45.—*Pathologic Anatomy of Cord in Paralysis Agitans and Senility. Charles L. Dana.
46.—*Contribution of Pathology in Chronic Hyperplastic Tuberculosis of Cecum, Based upon Study of Two Cases, in One of which Carcinoma of Cecum Coexisted. T. R. Crowder.
47.— Embryonal Renal Adenosarcoma. Maxmilian Herzog and Denslow Lewis.

**Clinical Review (Chicago), June.**

48.— Preparation for Obstetrical Operations. C. S. Bacon.
49.— Laryngectomy for Carcinoma: Recurrent Carcinoma: Fibroma: Fracture of Internal Condyle: Perineorrhaphy. Jacob Frank.
50.— Epilepsy with Pronounced Stigmata of Degeneracy: Cerebral Paralysis with Marked Aphasia: Partial Paralysis: Syringomyelia: Acute Mania following Trauma: Case of Spinal Concussion: Traumatic Epilepsy: Two Cases of Facial Paralysis. Daniel R. Brower.
51.— Exophthalmic Goiter: Mitral Stenosis: Empyema: Croupous Pneumonia. J. M. Patton.
52.— Surgical Clinic. Franklin H. Martin.
53.— Clinical Lectures upon Etiology, Pathology, Diagnosis and Treatment of Tumors. A. H. Levings.

**International Journal of Surgery (N. Y.), June.**

54.—*When to Operate in Appendicitis, and Why. John B. Murphy.
55.— Surgical Treatment of Chronic Empyema. Francis Reder.
56.— Regional Minor Surgery (continued). George G. Van Schaick.
57.—*Total Resection of Spermatic Cords vs. Castration and Vasectomy in Treatment of Prostatic Hypertrophy. G. Frank Lydston.
58.— Technique of Surgical Gynecology (continued). Augustin H. Goelet.
59.—Treatment of Fractures (continued). W. L. Estes.
60.— Aspects of Electric Treatment in Medicine and Surgery. J. McF. Gaston.
61.— Introductory to Mechanical Diagnosis and Treatment of Urethral Diseases (continued). Ferd. C. Valentine.
62.— Simultaneous Fracture of Vault and Base of Skull. Operation; Recovery. Howard Lilienthal.
63.— Contrast Between Shock and Feigned Injuries. C. A. Teague.
64.— Conservatism in Management of Contused and Lacerated Wounds of Extremities. R. S. Toombs.

**Kansas City Medical Index-Lancet, June.**

65.— Constipation. S. C. James.
66.— Chemical Analysis of Urine. E. G. Davis.
67.— Inversion of Uterus. A. H. Cordier.
68.— Gastro-Intestinal Disease (to be continued). C. W. Dulin.
69.— Evacuation of Uterus with St. Cyr Curette. D. W. Basham.
70.— Hysteria; Its Protean Manifestations and Treatment. John Punton.

**St. Louis Courier of Medicine, May.**

71.—*Mechanical and Surgical Problems in Paralyses in Children. Virgil P. Gibney.
72.— Leprosy: A Clinical Lecture. Isadore Dyer.
73.— Peroneal Muscular Atrophy. Given Campbell.
74.— Abortion; or, Expulsion of Unviable Fetus. Chas. O. Molz.
75.— True Interpretation of Certain Sounds in Physical Diagnosis. Warren B. Outten.

**Toledo Medical and Surgical Reporter, June.**

76.— Treatment of Typhoid Fever. Anna G. Smith.
77.— Feeding of Infants. J. D. Ely.

**Brooklyn Medical Journal, June.**

78.—*Varieties of Rheumatism and Their Differential Diagnosis from Rheumatoid Affections. Glentworth R. Butler.
79.— Bacteriology of Acute Rheumatism. Ezra H. Wilson.
80.—*Etiologic Factors in Rheumatism. W. N. Belchar.
81.—*Is There a Surgical Side to Acute Rheumatism? A. T. Bristow.
82.—*Thermaerotherapy in Rheumatic Affections. G. L. Kessler.

**Woman's Medical Journal (Toledo, Ohio), May.**

83.— Placenta Previa. Jane R. Keefer.
84.— Exophthalmic Goiter. Cora A. Moon.

**Merck's Archives (N. Y.), May.**

85.—*Adonidin: Physiologic and Medicinal Properties. Heinrich Stern.
86.—*Urea and Uremia. H. P. Colie.
87.—*Influence of Ichthalbin on Metabolism and Intestinal Activity. Drs. Rolly and Saam.

**St. Louis Clinique, June.**

88.— Relation of Chemistry to Practice of Medicine. C. W. Lillie.

**Yale Medical Journal (New Haven, Conn.), June.**

89.— Parasitic Eczemas. Chas. A. Kinch.
90.— Pott's Disease. Dudley Carleton.
91.—*Some Notes on Use of Hyoscin. Henry S. Noble.

**The Medical Dial (Minneapolis, Minn.), June.**

92.— Notes from a Lecture on Paresis Before the Senior Medical Class of Hamline University. C. K. Bartlett.

**The Post-Graduate (N. Y.), May.**

93.— Memorial Papers on Dr. William A. Hammond. By A. E. Lancaster, D. B. St. John Roosa, Joseph Collins, Chas. L. Dana Joseph R. Smith and Andrew H. Smith.
94.— Some Neurologic Notes. Philip Meirowitz.
95.— Concerning Amblyopia and Squint. Francis Valk.
96.— Reply to Prof. Valk's Paper "Concerning Amblyopia and Squint." A. E. Davis.
97.—*Physics of Steam Sterilization. Theodore Dunham.
98.— Physiologic and Artificial Sleep, with Remarks upon New Hypnotic: Chloretone. Wm. Henry Porter.
99.— Notes from Clinics. Dr. Caillé.

**Medical Standard (Chicago), June.**

100.— Illinois State Medical Society Organization. William O. Ensign.
101.— Syphilis: Phenomena and Management. Wm. S. Gottheil.
102.— Some Considerations in Diagnosis and Treatment of Diseases of Stomach. A. A. Kerr.
103.— Peritonitis Epidemica. Marcus P. Hatfield.
104.— Treatment of Hemiplegia, Enlarged Prostate, etc., by Electro-Therapeutics. C. S. Neiswanger.
105.— Treatment of Diseases of the Heart. Albert Abrams.

**Pennsylvania Medical Journal, May.**

106.— Address before Butler County Medical Society: How to Maintain a Professional Existence. H. D. Hockenberry.
107.— Grave Diseases in Young Children often Due to Latent and Unsuspected Inflammation of Middle Ear. Charles H. Burnett.
108.— Seventy-five Cases of Abdominal Surgery. W. D. Hamaker.
109.—*Treatment of Typhoid Fever. T. Q. Garvey.
110.— Progress of Laryngology. Lewis S. Somers.

**Southern Practitioner (Nashville, Tenn.), June.**

111.—Intestinal Obstruction (continued). Richard Douglas.
112.—Alcohol as an Anesthetic. Deering J. Roberts.

**Canadian Journal of Medicine and Surgery (Toronto), June.**

113.—*Relation of Deformity of Pelvis to Lateral Curvature of the Spine. H. P. H. Galloway.
114.— Clinical Notes on the Use of Eudoxin in Typhoid Fever. A. J. Harrington.
115.— Broad Ligament Cyst. Chas. M. Smith.

**Georgia Journal of Medicine and Surgery, June.**

116.— Human Tuberculosis with Especial Reference to Pulmonary Consumption, "The Great White Plague." W. L. Hughlett.
117.— The Physician the Nation's Guardian. J. Cheston King.
118.— Diseases of Stomach. Edgar J. Spratling.
119.—*Report of Unique Case of Appendicitis, with Some Thoughts on Treatment. James T. Jelks.

**Texas Medical Journal (Austin), May.**

120.— Maladministration of Public Medical Affairs in State of Texas. H. A. West.
121.— Three Cases of Closure of Jaws, Produced by Mercurial Stomatitis. J. E. Thompson.

**Medical Council (Philadelphia), June.**

122.— The Eye: How It Sees; Its Defects; and Their Cure with Glasses (continued). A. H. P. Leuf.
123.— Fibro-Myoma of Vulva. A. Morgan Cartledge.
124.— Gastritis: Its Pathology and Treatment. G. M. Randall.
125.—*Treatment of Appendicitis, with Report of Eight Cases. Oscar S. Brown.
126.— Treatment of Diseases of Nose, Throat and Ear by Family Physician. E. B. Gleason.
127.— Points in Surgery. Wm. V. Morgan.

**Charlotte Medical Journal, May.**

128.— Bacterial Diseases in General. Geo. W. Pressly.
129.— Hypertrophy of Pharyngeal Tonsil. Walter W. Duson.
130.— Sanitary Supervision of Schools. R. Percy Smith.
131.— Mitosis, or Regeneration of Endometrium. Byron Robinson.
132.— Laryngeal Diphtheria. Eugene B. Glenn.

**Journal of Comparative Neurology (Granville, Ohio), May.**

133.— Observations on Sensory Nerve-Fibers in Visceral Nerves, and on their Modes of Terminating. G. Carl Huber.
134.— Sensory Nerve Terminations in Tendons of Extrinsic Eye-Muscles of the Cat. G. Carl Huber.
135.— Contribution on Nerve Terminations in Neuro-Tendinous End-Organs. G. Carl Huber and Lydia M. De Witt.
136.— New Brain Microtome. Henry H. Goddard.
137.— Proposed Neurologic Bibliography of Ichthyopsida. F. J. Cole.
138.— Number and Size of Nerve Fibers Innervating Skin and Muscles of Thigh in Frog (Rana Virescens Brachycephala, Cope). Elizabeth H. Dunn.
139.— Digest and Criticism of Data upon which is Based the Theory of Ameboid Movements of Neurone. H. Heath Bawden.

**Memphis Medical Monthly, June.**

140.— Aseptic Management of Normal Labor. S. S. Crockett.
141.—*Notes on Some Points in Obstetric Practice. Gustav Kolischer.
142.— Treatment of Urethral Stricture. W. Frank Glenn.
143.—*Warning in Regard to Vaccination. Some Comparisons. F. J. Runyon.
144.— Modern Smallpox, with Report of Cases. F. S. McRady.

**New Orleans Medical Journal, June.**

145.— Some Recent History of Smallpox in New Orleans. Quitman Kohnke.
146.— Vivisection is a Necessity for Medical Progress. S. P. Delaup.
147.— Annual Report of 1900 to President of Tulane University of Louisiana, at Annual Commencement of Medical Department, May 2, 1900. Stanford E. Chaille.
148.— Medical Journalism. Chas. Chassaignac.
149.— Report of Case of Gunshot Wound of Left Lumbar Region, Penetrating Abdomen: Three Wounds of Colon and One of Stomach. Celiotomy. Enterorrhaphy. Recovery. E. D. Fenner.
150.— Case of Dermatitis Herpetiformis in Child Three Years of Age Cured by Circumcision. J. N. Roussel.

## AMERICAN.

1. **Cholecystectomy for Gall-Stones.**—The removal of the gall-bladder has not been a popular operation, especially in English-speaking countries, but Gibson believes that it has a far wider field of usefulness than its history would indicate. He reports two cases in which this operation was performed to advantage. One was that of a young person, with chronic cholecystitis and numerous stones in the gall-bladder, who came under observation during an acute exacerbation. The bladder was dissected out whole, and uneventful convalescence followed. In the second case, there was a small atrophic gall-bladder with stones and impacted calculi in the cystic and common ducts. This case occurred in an elderly woman. Choledochotomy was performed and cholecystectomy was the supplementary operation. There was a temporary benefit, but the patient died from exhaustion, due chiefly to capillary hemorrhage from jaundice. The cholecystectomy was not an essential feature in the fatal result, and Gibson says that this was the only possible method of dealing with the gall-bladder. He believes that this method is a physiologic operation, and that, while it is more dangerous in itself than cholecystotomy, it will not be in properly selected cases. The objection that it deprives the body of an organ of more or less physiologic importance, he answers by questioning the real necessity of a gall-bladder. In conclusion, he sums up the conditions calling for this operation as follows: "In all cases of cholecystitis with or without stones, acute or chronic, provided that the gall-bladder and gall-ducts can be properly explored, and that the conditions promise an easy removal of the gall-bladder, it is to be borne in mind that the more distended the gall-bladder, the more likely is its separation from the liver to be easy, and provided that the common and cystic ducts—sometimes also the hepatic—are demonstrated to be free from stone, and that in addition to stone there is no other obstruction of the lumen of the common duct such as a tumor, benign or malignant, of the pancreas. The operation is also recommended even when its performance is difficult or possibly entails a slightly greater risk in a limited class of cases—that is, when it is the only satisfactory way to deal with the gall-bladder as a prophylactic measure against malignant disease in the presence of long-standing irritation. If these various limitations receive a strict interpretation, the number of cholecystectomies that are justified by the above indications will be comparatively restricted, and the operation will be done only under circumstances that permit of its greatest usefulness with a minimum of risk."

2. **Acute Suppurative Folliculitis of the Scalp.**—Gottheil discusses two cases of disease that, he thinks, differ from the

types described by French and other authorities, in that at least one of these recovered. Washing with disinfectants, like salicylic acid oil, warm water and tar soap, and later xeroform and olive-oil finally produced a cure in about three months after beginning the treatment. All the hair follicles were involved and every hair shaft was detached, but the papillæ were not destroyed and the hair reappeared as abundantly as before though somewhat more inclined to be curly. This seems to form a picture that differs essentially from the folliculitides described by Quinquaud, Crocq, Besnier, and others.

3. **Effect of Summer Heat on Public Health.**—Chapin gives tables of the comparative mortality of the different months in the different years, showing the cases of gastro-intestinal diseases during the summer months in the city of New York. They show, however, a diminution of the death-rate from these troubles in the last few years, which is encouraging. Aside from gastro-intestinal disease, one of the greatest dangers in the summer months is from sunstroke. The general depression, due to great heat and humidity, is also noticed. In two nervous diseases, meningitis and convulsions, the summer death-rate is higher than the winter, though it is possible that some of the cases of meningitis are incorrectly diagnosed. Everything that can be done by the municipality to prevent the results of this unfavorable condition should receive attention, as the removal of decaying matter, the planting of small parks to give the cooling and purifying effect of vegetation, and especially cleanliness and care in the home life of the citizens. The use of alcoholics should be protested against and also the excessive use of nitrogenous foods.

4. **Seasickness.**—The instructions offered by Partsch for those liable to incur seasickness are to take no special precautions beforehand, to arrange to have nothing on the mind as regards conveyance, clothing, etc. Good ventilation should be looked for, hence, rooms amidship are preferable. The air inside should be as good as that outside if possible, as second-hand air is a factor in the causation of seasickness. He suggests staying on deck as much as possible, with the eyes closed most of the time, especially during the day, until immunity from optical vertigo is acquired. By this is meant the dizziness and nausea which often follows continued observation of unusual conditions in the environment. When the slightest sensation of illness is felt, one should lie down at once and close the eyes, using only one pillow, or none at all if very sick, as a pillow often makes the difference between almost absolute ease and great misery. Steamship motion can be analyzed into twenty-six different factors, and is, therefore, very complicated and almost incomprehensible. The person not being adjusted to the variations, the case becomes much like that produced by going up and down uneven stairs in the dark. The shock or disturbances occur in a continued series, each varying slightly and result in an accumulation of violence that we call seasickness. What is first disturbed in the mechanism is the vaso-nervous system; the blood-vessels in the abdominal cavity are relaxed, thus permitting the occurrence of a deficiency in the brain which is subjectively interpreted as nausea. Retching is Nature's remedy for this condition; the regurgitation of food from the stomach being merely an incident. After two or three days' seasickness and abstinence from food the patient's blood becomes impoverished, and this must be remedied by eating; if enough can not be taken at one time, frequent eating is recommended, seven times a day being about right. One should eat about fifteen minutes before rising, the three regular meals, half-way between meals, and at bedtime. He thinks that it matters very little what is eaten provided it is what is craved. Porter and stout are good, and so are hard, sour apples. When one is already seasick, liquid foods that require the least in digestion are best; when able to be up and about the meals should be eaten regularly, and followed by recumbency for at least fifteen minutes. At the table it is best to commence eating as soon as seated; if necessary in order to do so go to the table late and if possible stipulate with the steward for immediate attention. He prescribes malt beverages and alcoholics quite freely, and advises the patient to have a supply of eatables in the stateroom, making due allowance, of course, for the rats. All mental and muscular exercise should be avoided. When eating little, constipation is natural, but if it continues in convalescence, an enema of 20 drops of glycerin is the best relief. If the seasickness is accompanied with serious headache or mental uneasiness bromid is useful.

5.—See THE JOURNAL of June 9, p. 1445.

6.—Ibid., p. 1451.

7.—Ibid., p. 1459.

8.—See abstract in THE JOURNAL of May 19, p. 1259.

11. **"Estivo-Autumnal Fever."**—Veazie concludes his discussion of the diagnosis of yellow and malarial fever and their combination. His article is written simply to emphasize the fact that by clinical evidence alone we can not, in many cases, distinguish malarial and other pathologic conditions from yellow fever without the aid of the most searching microscopic and bacteriologic research. He agrees in this with the report of the Marine-Hospital Yellow Fever Commission. See also abstract in THE JOURNAL of June 16, ¶ 2, p. 1579.

12.—See abstract in THE JOURNAL of May 26, p. 1335.

13. **Collection of Clinical Material for Examination.**—Hart gives directions for collecting blood, serum and other materials for laboratory examination. The blood is best obtained from the tip of the finger or the lobe of the ear, the part having been carefully cleansed. A quick stab with an ordinary surgical needle will afford a free flow, which should be obtained without pressure. The first drop should be washed away and the blood then collected on glass microscopic slides. Blood serum can be obtained by raising a small blister, and collecting on a slide. Gastric contents should be collected in a wide-necked bottle that has been carefully washed. He figures a special form of sputum box, that will also do for the preservation of feces. For urine examinations at least three specimens should be obtained in the twenty-four hours, one on rising, the second at midday, and the third at bedtime. By adding some substance of bactericidal properties, the sediment and urea content may be preserved unchanged. For this, he suggests the use of urotropin, 1 gram to each 100 c.c. collected.

14. **Ethylic Bromid.**—Sondern recommends this agent as one of the safest and best for short operations. It must be very volatile, when poured on the hand must evaporate rapidly, must be entirely colorless and have a sweet odor. The entire quantity for a child is 5 to 10, and for an adult 10 to 20 grams. This is poured on an anesthesia mask, allowing only a small quantity of air. Anesthesia is obtained in from twenty to forty seconds, when the mask is removed and not reapplied. The administration must be arrested at the proper time, which is shown by the relaxation of the muscles of the neck and arms. If this is unobserved and the anesthesia is continued the muscles contract and there is danger of asphyxia, especially when operating on the larynx. If this moment has been allowed to pass, it is better to let the patient come out, and reanesthetize, preferably at another time. The anesthesia lasts about two minutes. For a person from 3 to 16 years of age, ethylic bromid has no equal, as the patient, though not completely unconscious, feels no pain. The fatal cases recorded may be attributed to either the use of ethylene instead of ethylic bromid, the use of an old solution, the use of the drug in repeated small quantities, the continuance of administration for longer than one minute, or repeated administration. The mask should never be applied more than twice at one sitting, as a case has been recorded where death occurred at the third application.

15.—See THE JOURNAL of June 9, p. 1445.

16 and 17. **Bacillus Aerogenes Capsulatus.—Thorndike** reports four cases of chronic malignant edema, in which the special bacillus of the disease was not found. Three of these cases occurred in the practice of Dr. Post, and one was of his own observation. He suggests that they are due to the bacillus aerogenes capsulatus of Welch. The lesson to be learned from these cases is to operate as soon as possible and after the time when the whole of the diseased tissue can be removed, if earlier operation is impossible. Pratt reports on the same sub-

ject five cases, including Thorndike's, with bacteriologic examinations. Of these only one was a case of pure infection with the gas bacillus, and it shows the marked progressive properties it may possess. In three cases, the organism appeared to gain entrance into the system from the gastro-intestinal tract, and in two, it was probably introduced by dirt through the wounds of the skin. The first case shows how rapidly the germs can be destroyed by cold. Immediately after death the body was placed in a cold-storage room where the temperature fell at night to 26 F., and it remained there sixteen hours. The bacilli found were in a condition impossible to cultivate. This Pratt attributes to the action of cold; a peculiarity that has been already noticed by Blumer, Welch and Flexner. The lesions produced by the gas bacillus on muscle tissue are remarkable; In some places the fibers were broken into small pieces and the fragments separated one from another and laid in different planes. Their torn edges were distinct, and their striæ well preserved, giving an appearance of debris, thrown about by an explosion. In other places, degeneration and digestion of muscle fibers appeared to have taken place.

18. **Uterine Retroversion.**—Kaan reports an operation that has some advantages in cases of retroversion. This method consists in picking up the round ligaments on a gathering-string and so shortening them that the uterus is placed in the normal position. He picks up the round ligament and peritoneum together with a double hook, about midway between the cornu of the uterus and the internal abdominal ring, then passes a suture of silk subperitoneally from the uterus as far outward along the round ligament as seems necessary. The tissue is puckered along this suture, the two ends of which are then tied together with moderate traction. To avoid cutting through, the silk used is of medium size and is passed into the tissue of the fundus at its point of entrance and through the ligamentous tissue at its exit. The strain on this stitch, however, is not nearly so great as on those of ventral suspension, which drags the uterus out of position.

20.—See THE JOURNAL of June 9, p. 1445.

21. **The Medical Treatment of Gall-Stones.**—Stevens holds that it is frequently difficult and often impossible to make a positive diagnosis of gall-stones, and that there is no known medicine by which their solution can be effected. Introducing a canula into the gall-bladder for the purpose of sounding for stones, introducing solvent remedies, or withdrawing fluids is dangerous as compared with the amount of good likely to be obtained, and should not be practiced. The same is true of massage in emptying the gall-bladder; and he says that there is only one safe and radical cure, that is, surgical operation. There is, nevertheless, what may be called a medical treatment of gall-stones that is often efficient in the relief of pain and other symptoms, and satisfies the patient that something is being done. Hot water applications may do some good but the use of opiates at the beginning of the attack is to be avoided. Constipation and intestinal sepsis should be treated. The administration of laxative medicines is often followed by so remarkably favorable results that the patients sometimes believe they have been cured, and the physician is also deceived. Salines and oils tend to lessen the congestion and cause an expulsion of septic products, and their use is, therefore, legitimate.

24. **What Not to Do in Ear, Nose and Throat Work.**—The things to be avoided that are mentioned by Goldstein are the use of water in syringing and attempting to get foreign substances, especially articles that swell, out of the ear; and the use of heavy, sticky oils with anodynes for the relief of pain. There is only one condition suitable for syringing, namely, the removal of impacted cerumen. He alludes to the abuses of the air-douche, and warns against its use in otitis media or acute coryza. The nasal douche also comes under his condemnation, and he thinks it will become obsolete. The spray requires too much air-pressure for its manipulation, thus causing much irritation and sometimes damage instead of benefit. The use of concentrated and irritating medicines in the nasal passages is also condemned. The use of cocain to make the patient feel relieved without permanent benefit should come under the head of malpractice.

27. **Traumatic Lumbago.**—By traumatic lumbago, Williams understands a sprain or contusion of the lumbar and ligamentous attachments of the vertebræ, which is one of the most common predecessors of spinal traumatic neurosis or neurasthenia. It is characterized by pain and difficulty in moving and, in some cases, interference with bladder and rectum, due to the pain. There is no paralysis, though at times there may be incontinence or retention. The duration of the condition is variable, the symptoms usually passing off in a month or less, but the back is often left sensitive for months or years. He does not believe that the cord is injured in these cases, and thinks that the hysterical disturbances and neurasthenia that follow are largely, if not totally, due to suggestion.

30. **Ocular Findings in Cerebrospinal Meningitis.**—The details of the ocular findings in 23 cases are given by Chance. Most of these were studied during the second or third week of the disorder and under considerable difficulty as regards ophthalmoscopic examination. Slight conjunctival discharges were observed in 7 cases. Motor disturbances were: internal squint of both eyes in 2 cases, complete ptosis of the left side in 1, complete mydriasis in 1, with slight contraction during convergence. Irregular degrees of dilatation of both eyes were observed in 6, and pin-point contraction in 3 cases. In no case was there cloudiness or other disturbance of the media, nor any disease of the iris, choroid or retina. In all the cases examined, there was congestion of the optic disc with some congestion of the choroid and retina. The optic nerve-heads were edematous and their surfaces and border lines blurred, usually unequally in two eyes. One case presented a height of three diopters in the right disc while the left side was measured by five. No hemorrhages nor embolic infarctions were observed in any of the cases, but in numerous instances, lymph-sheaths of even the smallest vessels were distended. In two or three, a certain circumpapillary region was free, while the swellings were noted in the periphery some distance off.

32. **Lesions of the Frontal Sinus, Etc.**—After describing the anatomy and development of the frontal sinus, Sattler gives the treatment of inflammation of these parts and the outcome. The successful treatment is almost exclusively surgical; and the author condemns an attempt to establish drainage through the closed and occluded fronto-nasal canal. The only method to be recommended is opening from without, the technique of which he describes.

34. **Reflex Amaurosis.**—The condition reported by Sloggett, which is unique in his experience and which he finds mentioned only by Swanzy, and by him discredited, is one of amaurosis due to reflex from the teeth. His patient had had no toothache or pain in the teeth themselves during the manifestation of eye symptoms which were completely relieved by the extraction of the decayed roots. The ophthalmoscopic examination throughout had been negative as regards any pathologic conditions, while the light perception was entirely lost during the attack.

41. **Congenital Dislocation of the Hip-Joint.**—Bradford discusses the anatomical causes of relapses after forcible reduction of congenital dislocation of the hip-joint. His observations are based entirely on the examination of five specimens. He finds that the principal anatomical peculiarities, which vary considerably in the individual cases, are dislocation of the head of the femur outward and slightly forward on the surface of the ilium, with a narrow triangular acetabulum facing more or less directly outward. The head of the femur is diminished in size and the angle of the neck to the shaft is reduced to nearly a right angle, while there is an increase in the angle of femoral torsion. The capsular ligament may be in the form of an hour-glass or simple sac, adherent to the surface of the ilium above, sometimes about the acetabulum below, and contracted at the neck of the femur. The obstacles to reduction are the peculiar attachment of this ligament, causing shortening of the ligamentous bands at various points, chiefly laterally and below; its constriction, sometimes in the middle, making it impossible to draw the head of the bone through; thickening of the capsule just above the apex of the acetabulum; adhesions between capsule and head of the

femur; contraction of the acetabulum; increase of femoral torsion so that when the head of the femur is placed in the normal acetabulum the knee looks inward. The obstacles to retention of the head after complete reduction are: flattened, or insufficient and too oblique acetabulum; insufficient head; short neck of the femur, and obliteration of the cavity of the acetabulum by a mass of dense fibrous tissue. The development of successful treatment of congenital dislocation of the hip will depend on the accumulation of experience and thorough pathologic knowledge. The skiagraph is of great value, and if it is perfected to an extent that will enable one to see more perfectly the condition before, during, and after treatment, still greater results may be expected.

42. **Periodic Family Paralysis.**—Crafts reports a case of this condition which he considers due to a toxin acting periodically, though it is possible that this or a similar toxic agent is causative also in myotonia and myopathies.

43. **Permanent Non-Progressive Ataxia.**—Three cases of permanent ataxia of rather dubious pathologic nature are reported by Brown, but he does not give any original hypothetic explanation. Two of them seem to be associated in their origin with pregnancy and its accidents. The other is that of a man, who was first troubled with blindness and severe headaches.

44 and 45. **Paralysis Agitans.**—Nonne's communication was called forth by a paper of Dana's, who, he thinks, differs from him in claiming positive lesions for paralysis agitans. He replies that the changes, which he found by the aid of the Nissl method, are the same as those discovered by Dana, and that there is no difference in the changes found in the senile cord and those discovered in paralysis agitans. The changes are not pathognomonic either in his opinion or those of German authorities. Dana follows this paper with a note claiming that the differences between them are not great, as he has held that paralysis agitans is a distinct clinical entity and not premature senility, and that we should some time find its anatomical basis. In his experience, he does not find the pathologic picture of the two conditions identical. He says that he never claimed any pathognomonic changes in the anterior horn cells, and that he found that there is an unusual degree of degeneration, vascular and sclerotic change in the anterior horn in this disorder, and more there than in any other part of the nervous system. His view is that in this disease the interruption in the flow of nerve impulses from the corticospinal dendrites to the anterior horn cells is only a working hypothesis, but that it is in harmony with pathologic findings, as Nonne admits.

46. **Tuberculosis of the Cecum.**—Crowder describes two cases of tuberculosis of the cecum and discusses the pathology, anatomy, etiology, pathogenesis and course. He finds that it occurs about equally in the two sexes and that it seems probable that the acute infectious or inflammatory conditions play a part in the etiology, and that the specific tubercular infection may reach the cecum through food. The cecum is in the primary localization in a great majority of cases of tuberculosis of the intestinal tract, as shown by Fenwick and Dodwell. The nature of the process is essentially a slow, chronic inflammation of slight intensity and, if it is limited to the cecum and not associated with active pulmonary involvement, the progress is slow, and sooner or later produces a tumor which may pass on to necrosis and abscess, terminating in localized suppurative peritonitis, or may break through the abdominal wall. The extension of the disease may be by the peritoneum itself, causing tuberculous peritonitis, which is comparatively rare, or it may be downward through the colon. It is generally by way of the mesenteric lymphatics. The relation of tuberculosis to carcinoma is discussed in conclusion. In the second of his cases, the patient died of malignant disorder in this region, which seems to have taken its origin from old tuberculous ulcers. In the other, the disorder was localized and recovery was apparently complete after resection.

54. **When to Operate in Appendicitis.**—Murphy thinks that the number of deaths is much smaller than it was ten or twenty years ago, when it was called 'inflammation of the bowels;" and that this is due to better surgical treatment. Speaking of the subject from a mortality standpoint, he excludes three classes of cases: appendicular colic, a condition which he thinks exists and can be diagnosed; catarrhal appendicitis as it is generally understood, since it does not materially, if ever, jeopardize life; partially recurrent appendicitis, a mild type which may be either the first or second of the above mentioned forms. The only one to be considered in relation to mortality is the acute infective appendicitis. He describes the conditions of this type as they occur, and discusses the symptoms. He believes that there is no need of asking "what will be the outcome" in any case where operation can be performed not over twenty-four or forty-eight hours after the beginning of the symptoms. If the diagnosis can be made in twenty-four hours and the operation performed immediately, there is a mortality of about 2 per cent., but after that the ratio greatly increases. If it is to be done, it should generally be inside of the first forty-eight hours. If the disease has advanced to the third or fourth day and there is circumscribed abscess with low temperature, it may perhaps be safe to wait, but even then the risk is possibly greater than that of operation. His general conclusion is that it is not justifiable to hold a single case of appendicitis beyond twenty-four hours after the diagnosis is made, without operating.

57. **Total Resection of Spermatic Cord.**—Lydston prefers total resection of the cord to either castration or vasectomy, as it is more rational and effective than the latter and superior to the former, for the following reasons: 1. It produces less traumatism, a very important item in old men. 2. It causes less danger to the kidney, because of minimized shock. 3. It causes none of the psychic disturbance incident to a consciousness of the loss of the testes. 4. It permits the use of cocain with more safety. 5. It makes subsequent shrinking of the testes so gradual that little complaint is made. Apropos of the danger of renal disturbance following castration, he says: I am satisfied that quite a proportion of the "peculiar" cases of mental aberration and delirium following the operation are uremic. The operation can be performed under cocain, .5 to 1 per cent. in 1 per cent. carbolic, with 10 per cent. antipyrin. One cord being resected at a time, it is easy to postpone the second operation in case the symptoms of cocain poisoning develop, which is very unlikely. The weakness of the patient may also be a cause for the second operation. He is in the habit of exposing the cord by an inch or inch and one-half incision over the inguinal ring. He divides the cord and ligates it in sections, taking out an inch or more of the structure. The vas deferens is excised separately, the stumps of the cord are sutured and tied together, and the tunica vaginalis is sutured carefully with catgut before closing the external wound.

71. **Paralyses of Children.**—The paralyses of children are: cerebral, spinal, and peripheral. The first of these may be considered as permanent for all practical purposes, the second often permanent, but the extent and duration depends on the cause, and the third is usually self-limited and complete recovery may occur. One of the first problems is in regard to what should be done with the muscles, i. e., whether we should advise exercise or rest. Gibney finds that in these patients it is best to advise absolute rest in the beginning, and to protect the joint from strain during the first year. He speaks highly of the practice of division of the tendons of contracted muscles, as putting them in better position and relieving the strain; and he has also grafted the tendons in certain cases. In conclusion, he says there is much to be learned in the treatment of paralysis, and many mechanical and surgical problems are yet to be solved. The early recognition of the lesions producing paralysis, the management of the early stages, the conservation of power, the protection of the fibrous structures about the joints, the prevention of deformity, when it does occur, the vicarious functions of muscles, the ablation of joints in "dangle legs," are points to which he calls attention.

78. **Varieties of Rheumatism.**—Rheumatism is here put under three heads: Rheumatic fever—acute or subacute, chronic articular, and muscular rheumatism. The first of these is an infectious disorder, the second not so clearly such, and the third has more evidence in favor of its neurotic origin

than of its infectious character or close relation to the acute form. The rheumatoid affections include gout and arthritis deformans; other types mentioned are acute arthritis of infants, joint symptoms in hemophilia and some affections of the nervous system, also rheumatic and tuberculous changes in the bones. The differential diagnosis is discussed, showing that while articular rheumatism is generally easily diagnosed, there are some conditions, especially in children, that may give a little trouble. Secondary arthritides of the acute septic forms are as a rule easily separated. Acute gout may be mistaken for rheumatism, but it occurs later in life, and is associated with local symptoms that are out of proportion to the constitutional disturbance. The acute forms of arthritis deformans may also give some trouble, but the greater elevation of temperature, more marked redness and pain and the presence of serous membrane inflammations will rule out arthritis deformans. There should be rarely any trouble in making the diagnosis in chronic rheumatism. Arthritis deformans is especially difficult to distinguish from rheumatic troubles in its early stages, but when the articular deformations occur there is not much doubt. Muscular rheumatism, as a rule, gives very little trouble in its diagnosis.

80. **Etiology of Rheumatism.**—Belcher notices the theories and the bacteriologic researches that have been published in regard to the cause of rheumatism, and concludes that acute rheumatism may be regarded as an infectious disease presumably induced by micro-organisms.

81. **Surgery of Rheumatism.**—Bristow's article is largely given to a discussion of O'Conor's method of treatment, which he thinks is more rational than might at first be supposed. He would not open the joints as soon as the nature of the disease is evident, but when there is danger of cardiac complication, or when the case has defied medical treatment. He thinks that this new departure is worthy of consideration and that we should follow it, avoiding rashness and holding fast to all that is good in it.

82. **Thermaerotherapy in Rheumatism.**—Kessler discusses the use of the hot-air treatment and notices a very large number of conditions in which it was of value, including acute articular, chronic muscular, and specific rheumatism, rheumatic pleurisy, rheumatic gout and arthritis deformans. He mentions the case of a patient who had been helpless for years but was completely relieved in thirty treatments.

85.—See abstract in our Therapeutics Department, this week.

86. **Urea and Uremia.**—From a consideration of the subject Coile concludes: 1. That acute uremia occasionally occurs without suppression of urine or obstruction to its flow, and in the absence of structural change of the kidney. 2. That acute uremia may occur while the amount of urea excreted is far above the normal. 3. That in such cases the increased amount of urea in the blood is from rapid tissue disintegration, until the blood is badly poisoned, and then is probably increased by nitrogenous food eaten, which can not be assimilated, and which disintegrates in the blood. 4. That in the treatment of acute uremia active diaphoresis is of little value, as so small an amount of urea is obtained that it is practically unappreciable, and the blood is thus deprived of its water and salt, which is not only unharmful but of great value.

87. **Ichthalbin.**—Rolly and Saam, from experiments with ichthalbin, find that it exercises a decidedly favorable influence, causing reduced excretion of nitrogen in the urine, and increase in weight. Its action on intestinal fermentation was positive, and it was found that the quantity of ethyl-sulphuric acid was permanently reduced in all four tests. The reduction within three days amounted to from one-third to one-fourth of the original value, only to increase again on suspension of the remedy. Notwithstanding the reduction of ethyl-sulphuric acid, the dejections still retained their fetid character, which is hard to explain, as the clinical results were eminently satisfactory in other respects. They suggest that a lessening of intestinal fermentation is obtained and that calomel can perhaps be replaced by ichthalbin in children, where a purgative effect is not desired at the same time.

91. **Hyoscin.**—From his experience, Noble has formed the following opinions in regard to this drug: It is uncertain to some extent in its action, and not every case will be benefited; about two or three out of every five. In old and feeble patients, a very small dose should be used, as they are profoundly affected by it. The remedy is equally beneficial when given by the stomach or hypodermically. If after gradually increasing the dose by the mouth, up to 1/60 gr., the desired effect is not obtained, it is useless to increase it further. Frequent doses are not required, not more than two being necessary in twenty-four hours. It does not act as a hypnotic except by allaying excitement; and may be combined to advantage with chlorid and bromid. He has never obtained anything like a curative effect with it, though it has been of decided benefit in relieving symptoms. It has little effect on the hallucinations of sight and hearing. One advantage of its use is its tastelessness and the small doses in which it can be employed. If the desired results are not secured by the administration of two doses of 1/75 gr. in twenty-four hours, it is well to abandon its use. Another advantage is the relief it affords to spasmodic contraction or cramps of the muscles of the lower extremities on retiring after unusual exertion during the day. A dose of 1/20 gr. given a half hour before retiring will usually entirely overcome this trouble.

97. **Steam Sterilizers.**—From experimental researches, Dunham concludes that the steam-gauge of pressure sterilizers indicates the temperature in all parts of the sterilizer only when all the air has been expelled and the sterilizer is filled with saturated steam. The thermometer in the top of the sterilizer gives no indication of the temperature at the lower parts, and if it is to be used as a guide, its bulb should be placed close to the bottom of the chamber. For sterilization done in hospitals, the ejector is a delusion worse than valueless in getting rid of the air; for the quickest method of doing this and replacing it by steam is by having all the steam enter at the top and the air pass out through the bottom and bubble up through water until a sharp water-hammer with very minute bubbles is established. Then the air is out for all practical purposes.

109. **Treatment of Typhoid Fever.**—Garvey discusses the various methods of treatment suggested: the antipyretic, antiseptic, eliminating and antitoxin. As regards the first, he thinks that it is untenable, though if so, it is hard at first to explain why Brand's treatment shows such a low mortality. The theory that is receiving the most support is that the action of cold water is not so much to lower the temperature as it is eliminative. The intestinal antiseptic treatment has come to stay, the drugs introduced for this purpose do not attack the bacillus typhosus, but rather the intestinal toxins produced. The third system, which is advocated by Thistle, of Canada, and Thompson, of New York, consists in eliminating by attempting to carry off the toxic substances they contain by purging, etc. He does not strongly commend this, though it has its merits, but he thinks that when the antitoxin treatment comes, it will be the ideal, for serumtherapy is the treatment of the future for typhoid.

113. **Curvature of the Spine.**—The theory advanced by Galloway is that many cases of lateral curvature of the spine are due to a pelvic deformity making an inclined sacral base for the spinal column. He believes that this cause has not been sufficiently recognized in the text-books, and he illustrates from various authorities, showing the pelvic deformity and consequent spinal curvature. He claims that the pelvic distortion, which in many cases may be credited to rickets, is the original cause and not the secondary result.

119.—See THE JOURNAL of October 21, p. 1041.

125. **Appendicitis.**—Brown believes that at least 90 per cent. of all cases of appendicitis can be successfully treated by medical means according to the method suggested by Terry, of New York, which consists of cathartic doses of castor-oil with olive-oil, followed by large draughts of hot water, and later by enemas of glycerin and olive-oil. Flax-seed-poultice plasters are applied to the abdomen. The diet is light and of easily digested food. Terry claims that the oil treatment re-

lieves the friction of inflamed tissues. To prevent the return of an inflammatory process he gives 1/2 ounce of olive-oil, followed by a glass of hot water, before each meal, for several weeks. Eight cases are reported, all of which have recovered and have done well up to date.

141. **Points in Obstetric Practice.**—Kolischer speaks of the posture of the mother during labor, with special reference to presentation of the anterior vertex, and discusses the diagnosis of the condition. The mother should be placed on the side which corresponds to the fetal occiput, and should remain there until it has completely descended, so that the fontanelle is the lowest point of the fetal skull. Another point mentioned is the management of the bladder, which in cases of strongly anteflected uterus may be still half above the symphysis. It is, therefore, advisable to use the long male elastic catheter and to examine the region for fluctuation, and if this is found, the head is gently pushed back, in order to secure a sufficiently high introduction of the catheter. Another point is the protection of the perineum; and the posture of the mother is of great importance in this respect, as is also the protection of the perineum by the hand in any appropriate way. The anterior hand rests on the fetal skull and crowds it against the symphysis in order to relieve the perineum and at the same time regulate its expulsion. The other hand has to support the perineum directly. Nothing is more erroneous than to suppose that the perineum must be pushed back over the head. It should be pushed upward against the symphysis and the head rolled over it with the least possible degree of distension. If the tension of the perineum is too great, episiotomy should be performed; that is an operation that is not done often enough. The incision has to be made in the lower third of the vulva and directed toward one of the buttocks. The probe-pointed bistoury is the best for this purpose. A laceration may be expected to occur when the perineum becomes exceedingly pale and wax-like in its appearance, when the epidermis is thrown off in tiny scales, when it becomes exceedingly thin, when the lower circumference of the vulva is interrupted by a staple, or when the central part of the perineum bulges out like a balloon. If the anterior margin of the levator ani is felt projecting like a sharp ledge, it may be incised, for if the muscle bursts subcutaneously there is a permanent defect of the pelvic floor which has to be operated on afterward, while the fresh wound of the muscle itself can be repaired at once by suturing. Still another complication is premature rupture of the membranes, which protracts the labor and makes operative interference exceedingly difficult. The colpeurynter is therefore an expedient in such cases. to prevent its breaking under pressure, the bag should not be filled to its full capacity. Its presence inside the uterus produces effective pains, while at the same time it promotes a serous moistening of the cervix. It acts as a substitute for the membrane, and when there is no further use for it, it drops into the vagina. Still another point deserving mention is the use of quinin during labor. It is generally erroneously considered a pain-producing drug, but it has a singular influence on the irregularity of pain, rendering it regular and less severe.

143. **Vaccination.**—Runyon discusses the respective advantages of humanized virus points and tubes. He says that in the presence of an epidemic of smallpox, the tubes are not sufficiently sure and speedy; when it is not possible to see the patient again and watch the result, the vaccin point should be used; but when the subject has been exposed to the infection, either the humanized virus or the point. When there is full control over the subject and vaccination can be done when expedient and there is no urgency, it is well to use the glycerinated virus and follow with the point. He thinks that at least 25 per cent. of those in whom vaccination has been effective have not received full immunity.

## FOREIGN.

### British Medical Journal, June 2.

**Pathology of Acute Yellow Atrophy of the Liver.** JOHN W. FINDLAY.—This paper gives the history and post-mortem examination of a case of acute yellow atrophy of the liver. In his discussion of the pathologic conditions, the author concludes that the microscopic appearances make a very complete picture and justify the reference of the case to yellow atrophy. It shows on how slender a basis the different forms of cirrhosis are classified. He supports the contention of Obrzut, that chronic yellow atrophy is nothing more than acute cirrhosis of the liver, differing from other forms only in quantitative histogenetic changes. In yellow atrophy, the degeneration of the hepatic cell is more extreme than in the ordinary type of cirrhosis, tending more frequently to death than to recovery of the cell. The connective-tissue forms differ little from those found in other cirrhosis, but the degeneration of hepatic tissue, as evidenced by the very numerous columns of hepatic cells, has gone much farther than in ordinary cirrhosis and has even outdone the so-called hypertrophic and biliary cirrhosis in what is regarded by some as its special feature. No cultures were taken from the liver or other organs in this case, but a few large bacilli were seen in the small branch of the portal vein and lying between the hepatic cell and the yellow area, which stained deeply with thionin. It seems most probable that these are the colon bacilli, which have been found by Adami in the liver in cases of cirrhosis as well as in other conditions.

**Chronic Brass Poisoning.** WM. MURRAY.—This is a type of metallic infection not usually mentioned in the literature and sometimes puzzling to the physician. Nearly all that is known of the disease heretofore is included in Hogben's article in the *Birmingham Medical Review* (1887). One person may be employed for months or years in filing or manipulating brass without contracting the trouble, while another may suffer from the very first. The main feature is anemia, accompanied by excessive debility and nervousness, with neuralgic pains and a green line at the base of the teeth. Later there are emaciation, tremors, cold sweating, cough, extreme weakness. There is also claimed to be a sort of paraplegia that occurs in the later stages. Brass is an alloy of copper and zinc in the the proportion of three to one. Murray considers the symptoms due more to the copper than the zinc, and that the severity depends largely on the amount of brass dust inhaled. As a treatment, he first tried iodid of potash, but without much success. Then, knowing that sulphate of copper is an antidote for phosphorus poisoning, it occurred to him that this last might exercise an antagonistic effect; he, therefore, tried phosphorus in 1/30-gr. doses three times a day, with results that exceeded his expectations. Later, for a change, he tried dilute phosphoric acid, 15 minims three times a day, and the effects were still more encouraging.

**Treatment of Smallpox by Salol.** JOHN BIERNACKI AND P. NAPIER JONES.—The use of salol in smallpox has been advocated by Dr. Charles Begg; and the authors report cases treated according to this recommendation. The salol is administered in doses amounting to about 60 gr. daily, or even more; and in one case, 15 gr. were given every three hours. It appears from the results of these eight cases, which are selected as being uncomplicated by previous vaccination, that salol may directly avert general pustulation and even have a partially abortive effect when given after maturation. It almost always hinders it, so that the pustules form more slowly and are more imperfect in a much higher proportion than is usual. The cutaneous inflammation is slight, and all irritation and unpleasant odor are absent. Scarring is inconsiderable and often *nil*, but the most remarkable effect of the treatment is that on the secondary fever, which becomes of little importance.

### The Lancet, June 2.

**Massage in Recent Fractures and Other Common Injuries.** WILLIAM H. BENNETT.—The use of massage in fractures is recommended by Bennett, who details the forms in which it can be of special advantage and illustrates some of the methods which are especially beneficial in relation to muscular spasm that is sometimes so troublesome in fracture of the leg. He insists that passive movement should always be preceded by smooth massage, which soothes the irritable muscles so completely that more extensive movements are readily carried out without exciting muscular contraction of a harmful kind. The great advantages of this treatment are given by him as follows: 1. The ease with which the patient is made comfortable by arresting the muscular spasm

and so relieving the pain. 2. The effecting of rapid absorption of effused blood, etc. 3. The prevention of stiffness by obviating the formation of adhesions. 4. The prevention of muscle-wasting and the preservation of the normal nutrition of the limb. 5. The shortening of the time by at least one-half, during which the patient is prevented from resuming the ordinary use of the limb. The only real objections to the plan, he thinks, are: 1. The difficulty which must often arise in carrying it out, as unless a competent masseur or masseuse is available, the time required must be frequently more than the ordinary practitioner can spare. 2. The fact that it is a treatment requiring so much intelligence and discretion in the mode of its application that it may be difficult at all times to find a person to whom it may be entrusted with safety when the practitioner is not prepared to manage the details himself. The objection which has been raised on the ground that movement of the fractured bones must result is of no value if the treatment is properly carried out, as the movement is then practically *nil* and certainly not enough to prevent union in any degree whatever. As far as his experience is concerned, the results are far superior to those obtained in any other way.

**Preventive Inoculation Against Typhoid Fever.** ALEXANDER G. R. FOULERTON.—In the discussion of this subject Foulerton gives the diagrams of temperature reactions on the rabbit after antityphoid inoculations. He reviews the statistics, as far as they have been acquired in regard to the effect of inoculation of cultures of dead bacilli of this disease, which seem to show that the method is of real value. The exact length of time the protection may last is not known, but if we accept the persistence of agglutinative power as an indication, the immunity lasts for at least two years. The immediate effects of the inoculation may be unpleasant, but they are not permanent, lasting only a few hours, and with never any more serious result than a short period of discomfort. He thinks that the use of this method would be very advantageous to nurses and others who are especially exposed to the disease.

**Medical Press and Circular, May 30.**

**Indications for Removal of Uterine Appendages.** J. MACPHERSON LAWRIE.—This author sums up the views expressed in his paper by saying that the ovaries and tubes require to be removed in the following condition: Chronic ovaritis, salpingitis, and cystic disease of the ovaries, when palliative methods have failed to afford relief; suppurative disease of the ovaries and tubes, i. e., pyosalpinx, tubo-ovarian and ovarian abscess; fibromyoma of the uterus of moderate size, either when the ovaries are diseased, or when the patient has been so debilitated by prolonged hemorrhage that hysterectomy would be especially dangerous; and tubal pregnancy. Mere neurosis, apart from organic disease, is not to be regarded as an indication for oöphorectomy under any circumstances. Further, he believes that mere puncture and resection of the ovaries and tubes is, in most cases, inefficient and satisfactory, and that for pyosalpinx, the abdominal route is usually preferable to the vaginal.

**Indian Medical Gazette (Calcutta), May.**

**Serum Treatment of Leprosy.** W. A. LEE.—After noticing the apparent good results claimed by Carrasquilla and Laverde, Lee reports his own experience with the Carrasquilla serum. He claims that it has been remarkably efficient in malignant cases of tuberculous leprosy where fresh nodular eruptions appear at frequent intervals and grow luxuriantly, forming diffuse, smooth, shiny infiltrations on the face and ears, the eruption being attended with a temperature ranging from 102 to 104 F. Only two such cases have been met with in the past six months at the Government Leprosy Hospital at Madras, of which he is superintendent, and each was injected with the contents of a vial of Carrasquilla serum equal to 9 c.c., with the result that fever quickly abated and the tubercular infiltration in the more severe case rapidly disappeared, leaving the skin shrunken and flabby. This patient has maintained improvement for three months with gain in weight and strength. In the milder case, the changes were less notable, though improvement was also observed. He admits that the advantages claimed for the serum may possibly be equally well obtained from the use of other albumin derivatives; for example, the watery extract of pure culture of bacillus pyocyaneus, injections of which excited marked febrile reaction in tuberculous and leprous patients. In an experiment made with Haffkine's prophylactic serum, on a nodular leper child, the usual reaction followed and no fresh tubercles have appeared for nearly two years. His observations show, however, that a febrile reaction is not necessary for the good effects of the Carrasquilla serum.

**Metamorphosis of Filaria Nocturna in Mosquitoes of Anopheles Genus.** —S. P. JAMES.—The purpose of James' article is to point out that the mosquitoes of the Anopheles type are hosts of the Filaria nocturna. His reasons for thinking that this, rather than the Culex, is the efficient host, are as follows: 1. Anopheles mosquitoes do not bite during the daytime—as their meals of blood are practically always taken during the night, i. e., when the filarial embryos are circulating in the blood—while Culex mosquitoes will feed at any time. 2. Anopheles mosquitoes collect many more embryos in the blood which they extract than do Culex mosquitoes. 3. The filariæ appear to undergo their metamorphosis with more ease and at a quicker rate in Anopheles than in Culex. This is evidenced by the fact that at no time during their development in Anopheles is motion suspended in the filariæ, and; in this climate, their metamorphosis in this genus of mosquito is complete in from twelve to fourteen days. 4. In the places in Southern India where filariasis is most common—Shertully, Alleppey, Cochin and other places in Travancore—the Anopheles genus of mosquito is more common in houses than is the Culex. The food of Anopheles appears to consist principally, if not entirely, of blood, as he has not been able to keep them alive on bananas or other vegetable food for any length of time, as can be done with Culex. 6. In two species of Anopheles with which he experimented, both were found to be efficient hosts, and it seems not improbable that other species of this genus would be also. He had considerable difficulty in breeding the Anopheles, but finally succeded. He does not consider this method of infection by Anopheles as frequent, since a man, under his observation, infected with filariasis, had lived for ten years with his wife and two children in a small one-room hut that was also the home of numerous mosquitoes, but neither the wife nor children have filaria in their blood.

**Bulletin de l'Academie de Medecine (Paris), May 22.**

**Filariasis Inoculated by Mosquito Bites.** P. MANSON.—This first communication from the newly-elected foreign correspondent of the Académie announces that man is inoculated with the filaria sanguinis by the bite of the mosquito. Manson incriminated the mosquito twenty years ago, but it was assumed that the insect sucked the embryos from man, and dying as it deposited its eggs in the water, the larvæ were liberated and ingested by man in drinking-water. His recent research shows that the embryos sucked with human blood as the insect bites migrate in its body to the most fully developed muscles, which are those of the neck and thorax, and pass thence into the proboscis, in which they are accumulated by the twentieth day, and are then transferred to man as the insect bites. Grassi has established that the mosquito does not necessarily die, but may survive after laying her eggs. The larvæ are deposited thus in the skin or lymphatics, where they complete their sexual evolution and mate. The resulting embryos are swept away by the lymph into the blood. This explains the primary localization of filariasis in the skin, the variability of the site, the elephantiasic lesions, and the appearance of the young forms in the blood. Several hundred mosquitoes were collected for Manson by Dr. T. L. Bancroft, in Australia—the ordinary "house mosquito," Culex ciliaris, supposed to be identical with our own Pipiens. They had been allowed to bite a patient with numerous filariæ nocturnæ in his blood, and were kept alive until killed with fumes of cyanid or chloroform at intervals of from one hour to twenty-five days. They were then admirably preserved in pure glycerin and dissected by Manson and Low at the London School of Tropical Medicine.

**Echo Medicale du Nord (Lille), May 27.**

**Varnish for Surgeons' Hands.** MARIAU.—Numerous and comprehensive tests have shown that a varnish, composed of

alcohol, lac and resin, forms an impermeable covering for the hands, preserving them from contact with septic matters in operating, and also ensuring asepsis—as far as the hands are concerned—in aseptic operations. Mariau's varnish is extremely adhesive and supple, does not break from any movements of the hands, and does not interfere in the least with the sense of touch.

**Presse Medicale (Paris), May 26.**

**Osmonocivity.** LESNÉ AND BOUSQUET.—This term represents the sum-total of the toxicity and lack of isotony between fluids, referring more particularly to the effect of human urine in experimental research. The writers claim that determining the toxicity of the urine alone, regardless of the isotony, leads to erroneous conclusions. They also insist that in deciding the toxicity of the urine, it is impossible to estimate in simple and general formulæ the complex biologic phenomena manifested in the death or survival of the animal. It may be possible, perhaps, to represent the osmonocivity of a simple solution with a given figure, but not of the urine, which contains multiple toxins in various amounts, with some of which we are not yet acquainted. Even isotonic correction can not apply with mathematical accuracy to a fluid as complex as the urine, and we must not expect too much from it.

**Progres Medical (Paris), May 26.**

**Sclerosis in Patches Commencing in Childhood.** BOURNEVILLE.—Only four cases of this affection commencing in childhood have been observed at Bicêtre during the last twenty years. One is described in full in this communication. The child was normal until his third year, although the father was a drinking man and the mother nervous. A fright at this time was followed fifteen days later by a severe attack of convulsions, lasting thirteen hours, then torpor for twelve days, and symptoms of pronounced cerebrospinal insular sclerosis developed, with moderate imbecility and epileptoid seizures. In Bourneville's experience, sclerosis of this kind commencing in childhood has a much slower course than when it appears later in life, and it may be accompanied by spasmodic paraplegia. A peculiarity of the present case is the predominance of the tremor and paralysis on the right side. Medico-pedagogic treatment produced much improvement and remissions were frequent. Arrived at manhood, the patient applied for military service, but a recurrence of symptoms, from lack of the douches, etc., to which he had been accustomed, resulted in his discharge in three months, and he is now in the incurable ward at Bicêtre. Bourneville urges that special regulations should be decreed for incurable imbeciles, allowing them only partial liberty, even during remissions, to prevent their becoming tramps or the tools of criminals.

**Semaine Medicale (Paris), May 23.**

**Bruit de Galop.** POTAIN.—The absence of the *bruit de galop* in normal conditions is due to the elasticity of the walls of the aorta. When the artery becomes less resistant, from atheroma, or loses its tone, as in typhoid fever, the wall either stretches too quickly or resists too soon, arresting the expansion of the artery and producing the *bruit de galop*. When the sound is very distinct on the left side, it is almost always connected with a dilatation of the heart, accompanying the generalized capillary arterial sclerosis of Bright's disease. Less distinct *bruit de galop* is noted in many febrile affections, particularly in typhoid fever. It indicates a certain degree of atony of the heart. When the sound is heard on the right side, it is a sign of dilatation of the right ventricle, frequent in dyspepsia from any cause. When noted with uremic dyspepsia accompanying a catarrhal nephritis, it is important to distinguish it from the same sound heard on the left side, which would indicate arterial sclerosis and concomitant interstitial nephritis, with an entirely different prognosis. In the same way, it makes a great difference to a chlorotic patient whether the *bruit* indicates merely a dyspepsia usually curable, when heard on the right side, or on the left, an interstitial nephritis which renders the prognosis much more serious. The *galop* of pericarditis must also be distinguished, as the participation of the myocardium in the pericarditic lesion indicates future danger. When the *choc* and the *galop* are heard in pericarditis, they indicate dilatation of the right cavities, especially deplorable when there is a tendency to symphysis, as without dilatation the symphysis may remain latent from the functional point of view. The systolic arterial *bruit de galop* is an element in the prognosis of the existing affection. In order to deduce these conclusions, the *bruit* must be carefully studied and, above all, not be confounded with the various double sounds.

**Muenchener Medicinische Wochenschrift, May 22.**

**Intracranial Complications of Acute Otitis.** BEZOLD.—Three observations are described, showing the severity of the intracranial complications which may occur insidiously in the most apparently harmless acute suppurative otitis media. They also impose the necessity of a close watch for the slightest ominous symptom, such as retarded pulse, optic neuritis, vertigo, etc., that surgical intervention may not be too late. This liability to serious complications is due to the anatomy of the parts, especially the variable development of the pneumatic cells, which in some persons honeycomb the temporal bone, while altogether absent in others, except the mastoid cells proper. It is impossible for us to determine positively during life the existence of extensive cells, but we can surmise their presence when an acute otitis persists an unusual time, and especially when the hearing returns nearly to normal in spite of the continuous discharge. A large cell of this kind in the floor of the mastoid portion, in front of or behind the digastric fossa, is the cause of the deep abscesses in the neck, below the mastoid process, as the pus descends by gravity. In the first observation, the symptoms appeared suddenly in the fourth week of an otitis affecting a hitherto sound ear, and indicated sinus phlebitis, pyemia and metastasic foci in the lungs. The lateral sinus was found filled with fluid pus and thrombi as far as the jugular bulb. In the second observation, a putrid abscess in the soft parts of the neck complicated an acute otitis media consecutive to erysipelas. In the third an abscess in the posterior portion of the temporal lobe communicated with a fistula inside the dura, which allowed the passage of pus through the mastoid-parietal suture, resulting in the formation of an external subperiosteal abscess 1 cm. behind the auricle. The primary temporal abscess probably originated from perforation of the tegmen tympani. The three patients promptly recovered after surgical intervention. The jugular vein was ligated in the first two cases. Bezold considers this a harmless measure in practiced hands, and one necessary to prevent further infection from this source.

**Wiener Klinische Wochenschrift, May 3, 10 and 17.**

**Sacral Extirpation of Carcinoma of the Rectum.** J. HOCHENEGG.—Nearly thirteen years have passed since Hochenegg first removed carcinomata of the rectum through the sacrum. He has now an experience of 121 cases thus treated, and 50 similar operations for other lesions. Excluding 4 deaths from embolism of the brain, bronchitis or some other cause not connected with the operation, his mortality has been less than 5 per cent., and 21 out of 62 patients survived more than three years. The first patient, operated on in 1887, is still in good health. There have never been any injurious results from the sacral operation, and one patient has since borne two healthy children. The operation does not require any preliminary purging; he found that formed feces were less detrimental to the wound than artificially softened discharges. He operates in cases farther advanced than others consider practicable. In two, that seemed absolutely hopeless he obtained a permanent cure. In three others he was compelled to refrain from extirpation and conclude with a palliative procedure, after opening up the neoplasm. Internal metastases, rigid carcinomatous fixation in the pelvic cellular tissue and extensive glandular involvement are the only limits he imposes. Adhesion to prostate and bladder, or to vagina and uterus is no counterindication, as he merely resects the involved portion of the secondarily-affected organ if the removal of the neoplasm can be done technically, without injuring the function of the remaining pelvic organs. He enucleates the coccyx under all circumstances, and resects more or less of the sacrum as required, sparing the lateral insertions of the ligaments as much as possible. When the rectum is resected, the two stumps are sutured together with the sphincter intact, as in operation on other portions of the intestines, which is the ideal operation, as normal continence is retained. If this can

not be accomplished the proximal stump is brought through the sacral wound and an artificial anus is established, or through the natural anus and sutured to the skin outside. The peritoneum has to be opened to mobilize the rectum for these maneuvers. The slit is closed at once with silk stitches, and not until this has been done is the carcinomatous portion resected.

**Descendants of Hereditary Syphilitics.** E. FINGER.—This comprehensive article was prepared at the request of the committee of organization of the approaching international congress of dermatology and syphilology. The author admits that it is theoretically possible for the first, second and even later generations to present manifestations of hereditary syphilis in the form of: 1, true, virulent syphilis; 2, syphilotoxic, dystrophic disturbances; or 3, immunity; and that they may exist independently or associated. But, in respect to the inheritance of true, virulent syphilis in the third generation, none of the twenty-four cases on record is absolutely unimpeachable. For this, three conditions are indispensable: hereditary syphilis in one of the parents, absolute exclusion of acquired syphilis in the second generation, and the unmistakable hereditary nature of the syphilis in the third. None of the cases on record combines all these conditions, although several are very remarkable. Only a case like the following would be absolutely conclusive: for a hereditarily syphilitic mother to bear a hereditarily syphilitic child and soon after its birth the father of the child to become infected with syphilis outside of the family. The question of hereditary dystrophic disturbances is still more unsettled, as they have no specific syphilitic character, and analogous disturbances occur in families free from any taint of syphilis, tuberculosis, alcoholism and lead-poisoning. They are also less frequent in children with true inherited syphilis than in those without. General nutritional disturbances, defective vitality, debility, infantilism, etc., undoubtedly occur as the result of syphilotoxic influences affecting the children of syphilitic parents, and also the rarer partial "dystrophies," but in the latter case the question whether they might not have happened without syphilis on the part of the parent arises. Dystrophic disturbances have also been known to occur as the result of syphilis acquired early in life. A conclusive case would be one in which hereditary syphilis was established in the second generation, while the acquired was absolutely excluded, either from infection of the sound or reinfection of the syphilitic. Syphilis acquired early in the third generation would also have to be rigorously excluded. From this standpoint the thirty-one cases on record are worthy of consideration, but are not absolutely convincing. The weak link is the exclusion of acquired syphilis in the second generation. In respect to the transmission of syphilotoxic dystrophic anomalies, the evidence shows that they become less frequent and milder in succeeding generations. On the other hand, the polylethality, the procreation of non-viable offspring, continues practically undiminished throughout the second and third generations, indicating that syphilis in its effect on successive generations entails decimation rather than degeneration of the race. In respect to the generally accepted doctrines of immunity, critical analysis shows that they are based more on tradition than on scientifically established facts, and that they need comprehensive revision. Our present assumptions in regard to immunity are contradicted by the comparatively brief duration of immunity even with acquired syphilis, the reinfections which come under our observation, and the reflection that such reinfections would be more common than they are if social and other factors did not combine to prevent them, such as prudence, routine, marriage, age and impotence. There are 14 cases on record in which syphilis was acquired by heredo-syphilitics; in 137 by syphilo-dystrophics, and in 29 by the sound children of syphilitic parents. The reports show that the acquired infection in their case was no milder than usual. The fact that so many children of syphilitic parents have lost their immunity by the age of puberty, if it ever existed, is a proof that this immunity can not be transmitted to their descendants. Finger questions whether we are justified in affirming unlimited, i. e., life-long, immunity even after acquired syphilis, and still less, the transmission of immunity to the children.

**Resuscitation an Hour After Apparent Death from Suffocation.** J. PRUS.—Large numbers of dogs were revived by maneuvers commenced from a few minutes to an hour after death from suffocation, chloroform intoxication or an electric shock. Prus believes that the same method applied to man promises equally favorable results. The circulation was artificially re-established by direct massage of the heart, exposed for the purpose through an opening in the thorax, supplemented by injection of salt solution in the centripetal end of the femoral artery. Respiration was re-established by means of a bellows communicating with the trachea. Regular, energetic action of the heart was restored after an hour's work, and during the third hour after death, the cutaneous and corneal reflexes returned and also spontaneous movements. Of 44 dogs killed by suffocation, 83.33 per cent. were thus resuscitated. One is still alive, a year later; the rest either succumbed to infection after a few days or were killed for purposes of research. The 21 animals killed with chloroform were treated in the same way, with successful resuscitation of 76 per cent.; the manipulations commenced after a maximum interval of an hour. The experiments with animals killed by electricity were less favorable. A paralysis of the heart seemed to have been induced, that was impossible to overcome, except in 14 per cent. The only experience with man was with a suicide by hanging. When first seen, about an hour had elapsed since death, but massage of the heart through an opening in the thorax restored independent rhythmic contractions of the auricles, and systole in the form of a wave propagated from the limits between the auricle and ventricle toward the auricular appendage. Suitable apparatus for artificial respiration could not be procured. The contractions of the heart became weaker and the signs of life gradually subsided after establishing the important fact that it is possible to stimulate the human heart to independent action two hours after apparent death.

**Thyroid Treatment of Cretinism.** W. VON JAUREGG.—The benefits from thyroid treatment of cretinism are no longer questioned. Nothing remains now but to determine the degree of improvement possible to be attained with it. The treatment must be kept up indefinitely, as its aim is to supply the missing function of the thyroid gland, and consequently it should be taken all through life, although less frequently after the first months. The results are more satisfactory the earlier treatment is commenced, and it should be instituted on the first suspicion of cretinism. Every child who seems unusually backward should be put on thyroid medication for a few months. If he makes marked progress the necessity for its continuance is indicated. Among the effects of thyroid treatment of cretinism the most striking is the improvement in the psychic and nervous functions. The reported cases show that the patients increase in height; the myxedema disappears; the fontanelles close; the teeth develop; the genital organs and menstruation tend to become normal; the distended abdomen recedes, and with it the umbilical hernia; the stiff, cretin hair falls out and soft hair grows in its place. The body temperature becomes normal, and the patient is transformed into a lively, interested and even talkative child or adult. The intelligence is improved, but sufficient time has not yet elapsed to determine the full effect of thyroid treatment on the development of a brain stunted by years of defective thyroid functionating.

**Wedge Osteotomy of the Tibia.** L. LUKSCH.—The Meyer-Schede wedge-shaped excision of the tibia and fibula in the treatment of genu valgum is more extensive than need be. Luksch points out that after excision of the wedge from the tibia—the point toward the fibula—the cut edges fit together perfectly, and the fibula adapts itself to the new position without requiring to be shortened, and affords a desirable support for the tibia. In case of genu varum, the wedge is turned with the broad end toward the fibula, which therefore has to be shortened. But, instead of resecting it at the weak point of the excision of the tibia, Luksch proposes oblique osteotomy farther down, between the middle and lower thirds. The sloping edges can be slipped along on each other until the bone is sufficiently shortened.